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APRIL 1993
Resolving
the
Thrift Crisis



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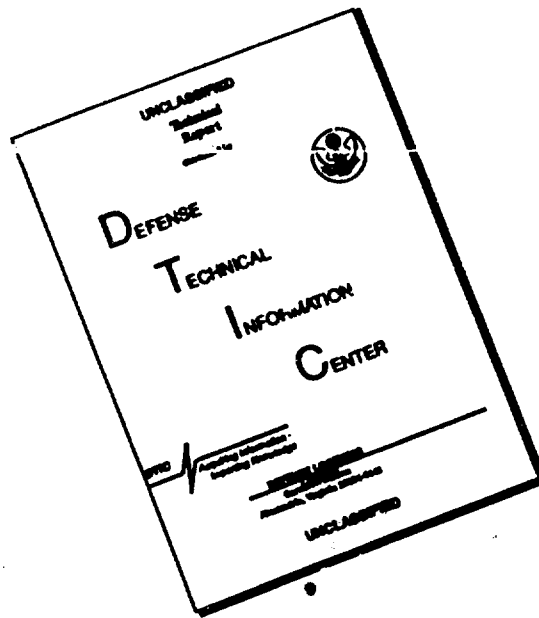
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RESOLVING THE THRIFT CRISIS

The Congress of the United States
Congressional Budget Office

NOTES

Unless otherwise indicated, all years referred to are calendar years.

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Preface

For more than a decade, the number of savings and loans and savings banks in the United States has been declining. The primary cause of this decline has been the financial failure of these thrift institutions. Because the deposits at these thrifts were insured by the Federal Savings and Loan Insurance Corporation, the federal government has borne the responsibility for resolving these thrift failures. In 1989, the Bush Administration proposed, and the Congress passed, legislation designed to deal with the thrift crisis. The initial phase of the cleanup is near completion; its ultimate cost will largely depend on how quickly and efficiently the remaining insolvent thrifts are resolved and their assets are liquidated.

At the request of the House Committee on Banking, Finance and Urban Affairs, the Congressional Budget Office (CBO) prepared this study of the cleanup of the thrift crisis. The study examines the underlying causes of the thrift crisis and the progress of the cleanup through the end of 1992, with special attention given to the role of the Resolution Trust Corporation. It also presents several options for improving the cleanup. In keeping with the mandate of the Congressional Budget Office to provide nonpartisan analysis, the study makes no recommendations.

Philip F. Bartholomew wrote this report under the supervision of Elliot Schwartz and Jan Paul Acton. Emily Kolinski provided valuable research assistance. Mary Maginniss and Larry Mote made major contributions. Many helpful comments and suggestions were received within CBO from James Blum, Robert Dennis, Douglas Hamilton, Robert Hartman, Kim Kowalewski, Thomas Lutton, Joyce Manchester, Marvin Phaup, Robin Seiler, and Robert Sunshine. Several others provided valuable comments, including James R. Barth, George G. Benston, Paul M. Horvitz, Edward J. Kane, George G. Kaufman, Robert E. Litan, Kenneth E. Scott, David R. Solenberger, James R. White, and Lawrence J. White.

Sherry Snyder edited the manuscript. Christian Spoor provided editorial assistance. Donna Wood typed the many drafts, Michael Crider prepared the drafts of the tables and figures, and Aaron Zeisler did the fact checking. With the assistance of Martina Wojak-Piotrow, Kathryn Quattrone prepared the study for publication.

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Director

April 1993

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Summary

During the 1980s, hundreds of thrift institutions became insolvent and failed. Because the Federal Savings and Loan Insurance Corporation (FSLIC) insured deposits at these savings and loan associations and savings banks, the federal government handled their insolvency--a process referred to as resolution. The size and scope of the initial problems in the thrift industry were not recognized fully, however, and the situation developed into what is now called the thrift crisis.

The enormous number of failures and their associated losses swamped the FSLIC and depleted its funds. Although from 1980 through 1988 the FSLIC resolved 489 thrifts at a cost of about \$60 billion (on a present-value basis), a lack of funds and ill-advised policy decisions on the part of the Federal Home Loan Bank Board, the primary federal regulator of thrifts, delayed the closure and resolution of insolvent thrifts. By 1988, thrifts that were resolved had been insolvent an average of 42 months. The Bush Administration and the Congress responded in 1989 by creating a new structure for supervising and resolving thrift institutions.

In 1989, the Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), which revamped the federal regulation of thrift institutions and established a temporary system to resolve the thrift crisis. By 1993, 653 thrifts had been resolved under this system at a present-value cost of about \$85 billion, and 81 more were in govern-

ment-controlled conservatorships. The Congressional Budget Office estimates that these conservatorships, plus additional projected failures, will increase the present-value cost of the thrift crisis by about \$35 billion. Thus, losses on failed institutions resolved after the passage of FIRREA are estimated to cost about \$120 billion on a present-value basis. Including the \$60 billion needed to pay for thrifts resolved before 1989, the thrift crisis will cost about \$180 billion--paid almost entirely by taxpayers--although the value could easily vary by \$15 billion in either direction.

FIRREA established the Resolution Trust Corporation (RTC) as a temporary agency charged with primary responsibility for cleaning up the thrift industry. Its job is to deal with failed thrifts transferred to its authority, compensate their insured depositors, and dispose of the thrifts' assets and liabilities--that is, resolve them. FIRREA charged the RTC with resolving failed thrift institutions that had been insured by the FSLIC and placed into RTC conservatorship or receivership between February 6, 1989, and August 9, 1992, three years after the date FIRREA became law. The Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 (RTCRRIA) extended this deadline to September 30, 1993. FIRREA mandated the RTC to conduct its operations so as to maximize recovery on assets it acquires, minimize the impact of its activities on local markets, make efficient use of its funds, minimize losses incurred in resolving cases, and maximize preservation of affordable housing. The RTC was to cease operations on December 31, 1996,

and to transfer the remaining assets and liabilities to the FSLIC Resolution Fund.

The 1989 act also set up a system for financing the cleanup and authorized \$50 billion. In March 1991, the Resolution Trust Corporation Funding Act of 1991 appropriated an additional \$30 billion. By summer 1991, the RTC's funds had been nearly depleted, and the Administration requested another \$80 billion to enable the RTC to continue the resolution process. RTCRRIA, which the Congress passed in December, appropriated \$25 billion, stipulating that it was to be used for resolutions through March 1992. Because the resolution process requires several months of lead time and because there had been such uncertainty as to how much would be appropriated and when, the RTC was able to commit only \$6.7 billion of this added money. The lack of further appropriations since RTCRRIA meant that the RTC could resolve only 11 failed thrifts during the last nine months of 1992.

Although the RTC is the primary agency responsible for the thrift cleanup, it is not the only player. FIRREA established a structure to control the RTC's activities. Originally, the RTC was managed by the board of directors of the Federal Deposit Insurance Corporation (FDIC), but its policies were promulgated by the RTC Oversight Board, chaired by the Secretary of the Treasury. Having, in effect, two boards proved cumbersome, and in 1991 RTCRRIA made the RTC an independent executive branch agency with a newly constituted Thrift Depositor Protection Oversight Board (still referred to as the Oversight Board and still with the Secretary of the Treasury as chairman). The Office of Thrift Supervision, which replaced the Federal Home Loan Bank Board as the primary federal regulator of thrifts, is an agency of the Treasury Department and is responsible for identifying and transferring failed thrifts to the RTC.

The act also created other government entities and authorized existing agencies to deal with other aspects of the cleanup. The FSLIC Resolution Fund, which is administered by the FDIC, handles the remnants of pre-FIRREA

resolutions. The Savings Association Insurance Fund (SAIF), also administered by the FDIC, insures deposits at thrifts and is scheduled soon to take over the RTC's resolution function. Other agencies involved in the cleanup include the Resolution Funding Corporation and the Federal Financing Bank, which provide part of the funding.

Now more than three and a half years old, the Resolution Trust Corporation has resolved 653 failed thrifts and controls 81 in conservatorships. By December 31, 1992, the RTC had disposed of \$330 billion in assets from the thrifts it had resolved, but it still controls about \$104 billion in the conservatorships and receiverships formed for the resolutions. By the end of 1992, the RTC had committed \$85 billion to losses at the thrifts it had resolved. This amount is only an estimate, however; the actual figure depends on how much the RTC ultimately recovers from the sale and collection of assets under its control.

The events that caused the thrift crisis were complex. And it is an understatement to say that the cleanup has been even more complicated than the causes. Not surprisingly, therefore, the issues that remain are multifarious and tangled. There are still no definitive answers to several remaining questions about the thrift cleanup: How much is left to be finished? How much more money is required? How long will it take to finish? and What can be done to reduce the cost? Although these questions are reasonable, their answers are not straightforward because the answer to any one of the questions depends in part on the answers to the other three.

Origins of the Thrift Crisis

The thrift crisis has been enormous. At the end of 1980, the thrift industry comprised nearly 4,000 federally insured thrifts with assets of about \$604 billion. Even the most

pessimistic forecasters would not have projected that by 1993 half of the industry would have disappeared at such a high cost to taxpayers.

Analysts of the thrift crisis have identified its numerous causes. The rigid regulatory design of the thrift industry, which limited the types of investments thrifts could make and the rates they could pay on deposits, left the industry extremely vulnerable to the high and volatile interest rates of the late 1970s and early 1980s. To be competitive, thrifts were forced to pay higher rates on their deposits than they could earn on their assets. The resulting mismatch in the maturities of thrifts' assets and liabilities almost wiped out the market value of the industry's net worth.

Policymakers hoped that federal deregulation of the thrift industry would enable it to recover. But the timing of reform was poor, and state deregulation, which occurred around the same time, created an inconsistent regulatory environment. Moreover, it was a mistake to grant more liberal investment powers to undercapitalized institutions and relax other regulations that fostered safety and soundness in thrifts' operations. In this lax regulatory environment, many owners, managers, and directors of unhealthy thrifts speculated with or plundered the funds of their institutions. Federal regulators either were unaware of the effects of these actions or chose to overlook them. In any event, this regulatory forbearance exacerbated the crisis by, in effect, encouraging thrifts to try to grow out of their problems.

The policy of encouraging thrifts to grow might not have been such a disaster had the operators of thrifts used newly attracted insured deposits to make prudent investments. But without a real threat of closure or regulatory disciplinary action, and with the safety net that federal deposit insurance provided, failing thrifts had little to lose from undertaking imprudent risk. To be sure, some thrifts that failed did not make speculative in-

vestments or misbehave. They lost money because they were unable to recover from their condition at the beginning of the decade, they were mismanaged, or they could not compete with thrifts that were making speculative investments. But by the end of 1988, 18 percent of thrifts, holding almost a quarter of the industry's assets, were insolvent on a book-value basis.

Most experts agree that the existence of the federal deposit insurance system and the way in which regulators operated it were major culprits in the thrift crisis. The failure of government regulators to close failed thrifts in a timely manner, for example, probably doubled the cost to taxpayers.

Progress and Performance of the RTC

The RTC got off to a slow start, resolving only 37 failed thrifts in 1989. This pace might be expected of a newly created agency that employed more than 7,000 people and, in terms of assets, overnight became the largest financial institution in the world. By 1990 and 1991, it was up to speed, resolving thrifts at the rate of about 80 to 90 or more per quarter. The pace of resolution and the commitment and availability of funds to cover the losses of resolved thrifts, however, were highly erratic. In 1992, as a result of funding shortfalls, the RTC was able to resolve only 67 failed thrifts--56 of them in the first quarter.

In addition to paying off insured depositors, the RTC performs two major functions: resolving failed thrifts (that is, either selling institutions in whole or in part or liquidating them), and disposing of the assets it retains because it cannot transfer them in institutional sales or because it must liquidate the institution. A third important area of the RTC's performance is its own management operations.

The Resolution Process

Following the long-standing tradition of the FDIC and the FSLIC, the RTC has sought to minimize its cost of resolving a failed thrift by selling most or all of the institution to another thrift or bank. The acquiring institution purchases the assets of the failed thrift and assumes its liabilities as long as the RTC pays the acquirer an amount that makes the thrift whole (that is, makes the value of the failed thrift's assets equal to the value of its liabilities). The acquirer is generally willing to accept less than the value of the liabilities (primarily deposits) if the failed thrift has franchise value--the value of the acquired institution as an ongoing concern, which includes its relationships with customers. Because the value of these relationships is lost when the RTC liquidates a failed thrift, the RTC seeks an institutional acquirer to "purchase and assume" the failed thrift. By law, the RTC can resolve a thrift by selling it only if the cost associated with the purchase and assumption is less than that of a liquidation.

The RTC has resolved most of the thrifts in its caseload through purchase and assumptions, but few resolutions have involved the sale of whole institutions, in which all of the assets and liabilities are passed to acquirers. Many failed thrifts held so many dubious assets that the RTC could not negotiate a reasonable price for their inclusion in an institutional sale. Even partial purchase and assumptions have been increasingly difficult to negotiate. Furthermore, the estimated savings to the RTC from using purchase and assumptions rather than liquidations has diminished. Thrifts have remained in conservatorship just over one year on average while the RTC seeks a willing acquirer. Some failed thrifts have remained in conservatorship far longer.

Recognizing that the RTC was having difficulty arranging institutional sales, the Office of Thrift Supervision (OTS) introduced the Accelerated Resolution Program (ARP). The ARP is essentially an OTS resolution that bypasses the conservatorship stage. The cost of

resolution, however, is paid for by the RTC. It is still too early to judge the success of the ARP, but the concept has merit. In early 1992, the OTS proposed a variation of the program--called the Early Resolution Accelerated Merger program--in which the OTS offers the owners of thrifts that are likely to fail a financial incentive to arrange their own sale. This proposal has not been put in place.

Asset Disposition

The RTC has been criticized both for its methods of disposing of assets and for its slow progress in doing so. From its inception in 1989 through December 1992, the RTC took control of 734 thrifts with assets valued at about \$396 billion. By December 31, 1992, the RTC had disposed of all but \$104 billion of these assets. Of this amount, \$40.2 billion was in the 81 conservatorships still operating at the end of 1992, and \$63.4 billion was in the receiverships formed for resolutions. About 51 percent of the assets the RTC controlled then were in hard-to-sell real estate, construction and development loans, nonperforming loans, investments in subsidiaries, and other assets whose disposition is likely to take a while. But the RTC still retains high levels of cash, investment securities, mortgage-backed assets, and performing mortgages, which should be relatively easy to dispose of quickly.

Under the assumption that assets lose value more quickly in the hands of the government than in the private sector, the RTC would like to sell all of its assets as quickly as possible and at the highest price possible. But the sheer volume and the diversity of the assets it controls probably preclude the RTC from using the most straightforward method--a huge auction. The RTC therefore has resorted to a variety of less straightforward techniques that give the appearance of disposal or sale but are really more of a transfer of assets, which leaves the RTC exposed to financial loss.

To speed up disposition, the RTC has offered some noncash incentives such as providing financing for asset sales. It has also securitized

assets, placed assets on consignment, and used private contractors to manage the assets. Some of these practices give the appearance that the RTC is disposing of assets, but because the RTC does not relinquish its responsibilities for the assets, these practices constitute neither a sale nor disposition.

Any one of the methods the RTC has used to transfer assets to the private sector may be a second-best solution--that is, the best under the circumstances but certainly less than ideal. The RTC, however, has been very inconsistent in its use of these methods, constantly shifting emphasis from one technique to another. The agency would benefit from having a more consistent, focused approach to asset disposition. Such an approach might well include not only multiple methods of disposing of assets but also criteria for deciding when certain methods are preferred.

RTC's Management Practices

Additional criticism of the RTC rests with its management practices. The agency was slow to set up appropriate management information systems. Potential acquirers of institutions or specific assets were discouraged by being unable to obtain necessary information from the RTC in order to submit bids. The institutions the RTC controls and the assets it manages have lost value because the RTC either lacks the resources or the incentives to preserve value or minimize losses. The RTC has been unable to develop fully systems to inventory the assets or to prepare lists of assets for sale. It has also been remiss in adequately monitoring the many private contractors it relies on.

Options for Completing the Thrift Cleanup

Although fewer thrifts are expected to fail and require resolution over the next five years

than have been closed and resolved in the last four, it would be premature to judge the cleanup finished. The RTC still has conservatorships to resolve, more open thrifts to resolve, and several hundred billion dollars of assets to dispose of.

The Congressional Budget Office's latest estimates project that the resolution aspect of the cleanup will continue through fiscal year 1998 and that asset disposition will then continue for several more years. If the Congress appropriates funds in the spring of 1993 and continues to make funding available, the cleanup is projected to require about \$43 billion in nominal dollars (or about \$35 billion in present-value terms). This projection assumes that either the life of the RTC is extended or its successor--the Savings Association Insurance Fund--will be given sufficient resources on a timely basis. An additional \$7 billion would be required to capitalize the SAIF so that it can carry out its function as the insurer of thrift deposits.

Several options are available for changing the thrift cleanup. Some of them are related to the general cleanup, and others relate specifically to RTC operations. Most of the options for improving RTC operations could be applied more generally to any agency that resolves failed financial institutions or is responsible for disposing of government-controlled assets.

General Options

Changes could be made to the funding, scheduling, and structure of the remainder of the cleanup. There are several options for effecting these changes.

The timing of the funding needed for the cleanup is discretionary and in part depends on the scheduling and structure of the remainder of that process. Since past delays in funding have added to the ultimate cost of the cleanup, expediency is warranted. Delays in closing failed institutions have been expensive both to the taxpayer and to the economy as a whole.

The Savings Association Insurance Fund is currently scheduled to take over the RTC's resolution function in October 1993. If the Congress does not extend that deadline, the SAIF will have to finish the job the RTC began. The transfer of personnel and other resources from the RTC to the SAIF could be disruptive and further delay the cleanup. To avoid such a delay and the ensuing costs, the Congress could extend the term of the RTC's resolution function.

Two options would change the structure of the cleanup and avoid foreseeable administrative disruptions. First, the RTC could become a permanent agency that would be responsible for disposing of the assets of failed financial institutions and settling residual claims against government-controlled receiverships. But it is not clear that this function warrants a permanent separate agency, and its creation may further add to the complexity of the government bureaucracy. Alternatively, the RTC could be merged with the Federal Deposit Insurance Corporation. Placing the RTC within an agency that already resolves failed institutions and disposes of assets--albeit for banks--may be the most efficient option. It would also simplify the apportionment of funding and obviate the current question of scheduling the completion of the cleanup. But this alternative would add to the FDIC's responsibilities and further complicate oversight of its activities.

Options for Improving RTC Efficiency

Regardless of how the remainder of the cleanup is funded, structured, or scheduled, experience with the thrift crisis suggests options for changing the methods for resolving failed thrifts and disposing of their assets. These options could improve the RTC's operations and could apply as well to whichever agency becomes responsible for the cleanup.

There are four major areas for considering options to lower the cost of the cleanup, three

of which are in the purview of the RTC--how it resolves failed thrifts, how it disposes of assets, and how it manages its own operations. The fourth is really up to the Office of Thrift Supervision--namely, managing the regulation of the existing thrift industry and placing insolvent thrifts into the RTC caseload so as to avoid further losses.

Change the Way Failed Thrifts Are Resolved. Experience has shown that delaying the closure of thrifts that have failed in an economic sense carries high costs. The OTS has responsibility for determining when troubled thrifts should be placed in the RTC caseload. Although rapidly placing more institutions in the RTC's caseload would add a greater burden to its task, the speedy removal from the private sector of thrifts that are judged to be failures would benefit the operation of healthy thrifts by removing competitors who bid up the cost of doing business. Whether the potential benefits from accelerating the pace of closure would be outweighed by the additional costs of carrying the larger inventory of assets that the RTC would suddenly acquire depends on a number of factors. One of the most important factors is how the RTC would carry out its responsibilities for resolving institutions and selling assets.

The Resolution Trust Corporation currently resolves each failure on an institution-by-institution basis. This approach preserves the legal entity that is being resolved, but it precludes potential benefits to be gained by combining thrifts for sale in packages of multiple institutions. Although these institutional sales have higher administrative costs, they may result in a higher net return because the package would have a higher franchise value than a single institution.

The cost of seeking institutional acquirers for purchase and assumptions, however, may be exceeding the savings such sales generate over simply liquidating the failed thrift. If a thrift is in such poor financial condition that the OTS must transfer it to the RTC, simply liquidating it may be cheaper than delaying the resolution process further. Although insti-

tutional sales are estimated to be on average 3 percent cheaper than liquidations, the cost of waiting and searching for acquirers may not justify continuing the practice.

Responsibility for resolving failed thrifts could be divided between the OTS and the RTC—with the OTS attempting institutional sales and the RTC liquidating the institutions it receives. Some troubled thrifts may have some value as an ongoing concern. In these cases, the OTS could use the Accelerated Resolution Program and arrange a sale. If the OTS cannot find a buyer for the institution, it is unlikely that the RTC will be able to. The Department of the Treasury could oversee the funding of this arrangement using the existing cleanup structure.

Change the Way the RTC Disposes of Assets. The RTC retains a substantial amount of assets in receiverships whether resolution was handled with an institutional sale or a liquidation. It must account for the proceeds of these receiverships so that they can be correctly distributed among legal claimants against the failed thrift. To improve its program for disposing of assets, the RTC could use a variety of sales techniques, repackage assets for sale, change bidding practices, improve the way it uses private-sector managers, and scale back or eliminate the program for securitizing pools of assets.

There are advantages and disadvantages to strategies based either on retailing (selling individual or small parcels of assets) or wholesaling (bulk sales). With an inventory the size of the RTC's, it makes sense to use both. Large bulk sales have lower average administrative costs than do sales of small parcels. But retailing broadens the pool of prospective buyers, and the resulting competition could bid up prices. Although having the RTC provide buyers with financing only transforms an RTC-controlled asset to an RTC-owned loan, seller financing can further broaden the pool of bidders and assist the RTC's retail sales.

Assets controlled by the RTC are of various types and quality. The RTC therefore could

operate like a "junkyard" and sell assets "as is" on a first-come, first-served basis. Alternatively, the RTC could repackage assets into bundles that collectively would be more attractive than the separate pieces. Repackaging can create bundles of similar or dissimilar assets. Sales of bundles of assets with similar characteristics permit both the RTC and buyers to specialize and thus minimize information costs. Such sales can be attractive to buyers wishing to obtain diversified portfolios.

The RTC can use auctions in both retailing and wholesaling in conjunction with buyer incentives such as seller financing. Instead of holding an auction in which bids are offered and the highest is taken, however, the RTC could try a "Dutch auction." Under this system, the RTC would set an initially high price for each asset and lower it until the asset was sold. This pricing system could be used for either standard auctions or a junkyard sale.

The RTC currently relies on private-sector contractors both to manage and to sell some of its assets. Many of its initial contracts were strongly criticized by the General Accounting Office and others. Although it has improved its use of private contractors, the RTC needs to set correctly the incentives for these contractors so that it obtains the most value from the managed assets. It should base its payments to contractors both on the volume and on the sale price. Otherwise, contractors may dump assets too quickly or manage assets without regard to preserving their value.

The RTC has embarked on a major program to securitize pools of assets it controls and to sell securities that are collateralized by the pools. Securitization is not really a sale: the RTC retains a contingent liability by offering certain guarantees of the value of the collateral for the securitization. Securitization has worked fairly well in financial markets. By pooling assets that collateralize a particular security issue, the risks of any one asset are spread across the pool. Securitization also provides the issuer with cash for a pool of assets it controls. For the RTC, securitization has the added benefit of permitting it to claim

that the securitized pool of assets has been transferred to the private sector.

The method has two major problems in addition to the contingent liability that it creates for the RTC. First, the RTC incurs a cost in securitizing assets that it could avoid by selling assets directly. Financial agents charge a fee to underwrite the issuance of the security. It is unclear whether this cost is higher or lower than the cost for the RTC to market the asset directly. A second problem is that not all assets under RTC control can be securitized. Although securitization has some advantages, it is not clear that it should be the primary disposal strategy.

Improve the RTC's Management Practices. The General Accounting Office has been highly critical of all aspects of the RTC's management information systems. Further improvements in this important area are necessary to achieve overall efficiency. Without adequate systems to monitor assets, control inventory, and manage private-sector contractors, the RTC cannot hope to dispose of assets efficiently.

The RTC could improve the computer systems it uses to monitor assets. This improvement is necessary both for tracking the assets of the huge number of receiverships and for controlling inventory. Not having an adequate system for handling inventory limits the RTC's flexibility in how it disposes of assets.

The RTC also needs to manage and monitor better its contracting operations. Uniform procedures are needed for evaluating the fi-

nancial and technical capabilities of contractors. Furthermore, the RTC needs to improve the training of its contracting personnel.

Conclusion

The thrift crisis has been an unfortunate episode in U.S. history. Although financial markets were not subject to the panics that ensued when thousands of banks and thrifts failed during the 1930s, taxpayers have paid an enormous price. A substantial portion of this price was the fault of poor and mistimed government policies and a major regulatory failure.

The cleanup has been under way for more than three years. Although there is more work to be done, the end is in sight. The RTC has resolved an enormous number of failed thrifts and disposed of a substantial amount of the assets and liabilities that were in those institutions.

Although the RTC is still not moving as fast or as efficiently as it might, some difficulties are beyond its control. The lack of funding since April 1992 has almost stopped the cleanup. The economic recession, depressed real estate values, and poor conditions in the thrift and other financial industries in general have not helped either. Some of the RTC's problems are a result of the conflicting objectives established by law or by its strategic plan; others are within the power of the RTC to control and improve.

Introduction

By now most people are familiar with the term "thrift crisis," but few understand very much about it, in particular how the government is resolving it. The 1980s witnessed the failure of hundreds of savings and loans and other savings institutions whose deposits were insured by the now defunct Federal Savings and Loan Insurance Corporation (FSLIC). Because the FSLIC guaranteed the deposits of these thrift institutions, the federal government dealt with their insolvency.

Handling a failed thrift is a complex process that has been further complicated by the vast number of insolvencies and the enormous cost of insuring deposits. Federal thrift regulators--sometimes in conjunction with state regulators--are responsible for recognizing failure, closing the institution, and resolving it. Put simply, resolution involves selling off a failed institution's assets, guaranteeing the deposits of insured customers, and settling all other claims against the institution. Because the claims against failed thrifts have substantially exceeded the value of their assets, the federal government has been stuck with an enormous bill for the cost of the cleanup.¹

The crisis has many dimensions. Fundamentally, the problems of adjusting to adverse economic conditions, increased competition in

financial markets, and the contraction of the thrift industry were turned into a crisis by the performance of government decisionmakers who only worsened an already bad situation. Thus far, this crisis has resulted in the dissolution of more than 1,000 savings and loan associations and savings banks.

The crisis was sparked by the initial financial collapse of hundreds of these thrift institutions in the late 1970s and early 1980s when interest rates skyrocketed and became highly volatile. It was compounded when regulators permitted insolvent and undercapitalized thrifts to remain open and make many questionable and some highly speculative investments. Because deposits at thrifts were insured by the FSLIC, most depositors were protected from loss when their savings and loan collapsed. But the federal government, and by extension the taxpayer, was not as fortunate; the Congressional Budget Office (CBO) estimates that the direct cost of the crisis (on a present-value basis in 1990 dollars) will be about \$180 billion.

Unable to contain the spread of thrift failures, the federal government soon found itself liable for most of the cost of paying off insured depositors, as the FSLIC ran out of money and the number of failures ballooned. The Congress provided \$10.8 billion as a stopgap measure in 1987, but that amount barely touched the problem. In 1989, policymakers began to recognize fully the dimensions of the crisis, and the cleanup began in earnest with the passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA).

1. Although insured depositors are guaranteed 100 percent of their qualifying deposits, the federal government, which is responsible for that guarantee, must share in the proceeds of asset sales with other creditors of the failed thrift.

This study assesses how the thrift crisis is being resolved--that is, how FIRREA has worked. FIRREA, which is discussed in detail in Chapter 3, established a framework to deal with:

- o the causes of the crisis, primarily through reform of regulations governing the behavior of thrifts and their regulators; and
- o the cost of reimbursing depositors who had insured accounts at institutions that no longer had the money to pay them.

FIRREA set in motion a complicated and interrelated set of activities that have resulted through December 1992 in the closure or resolution of 734 thrift institutions and the expenditure of about \$85 billion of appropriated funds (excluding funds associated with pre-FIRREA thrift resolutions and funds for so-called working capital).

Three years after the FIRREA-mandated thrift cleanup began, judgments differ about how much remains to be done, how successful the process has been, and what steps might be taken to improve it. This study examines all of these questions.

Where Does the Thrift Industry Stand Now?

By several measures of financial health, the thrift industry is in much better shape today than it was in 1988.² The industry has slimmed down, firmed up, achieved profitability, and improved its capitalization (the ratio of capital to assets). Given the increasing

competitiveness in financial markets, however, it is uncertain whether thrifts can remain viable in the long run.

At the end of September 1992, thrifts held \$816 billion in assets, less than two-thirds of the nominal value of the industry's assets three years earlier. This decline is in stark contrast to the 1980-1988 period, when the combined assets of the thrift industry steadily increased, peaking at almost \$1.4 trillion in 1988.

The number of institutions in the thrift industry has shrunk by almost half since 1980, from nearly 4,000 institutions to fewer than 2,000 at the end of September 1992. Well over half of the 2,000 institutions that have left the industry have done so at a cost to the government, having been resolved either by the FSLIC or, after FIRREA, by the Resolution Trust Corporation.

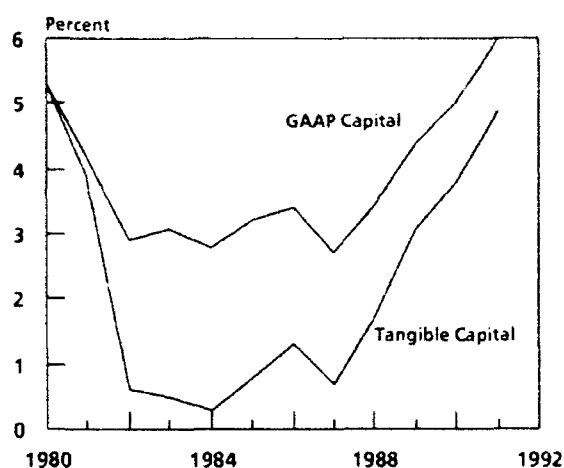
After four years of losses, the thrift industry reported profits in 1991. The industry had record profits during the first three quarters of 1992; net after-tax income exceeded \$4 billion, representing an average annual return of almost 0.7 percent of assets. Although this rate of profitability is about the same as the rates of the 1970s, two features of these earnings are worrisome. First, these earnings were realized during a period when the spread between the interest rates thrifts earned on assets and paid for deposits was at record levels. When this spread diminishes, as anticipated, thrift profitability may decline. Second, non-interest operating expense as a percentage of assets has increased significantly over the past several years, reaching 2.1 percent in mid-1992. If this trend continues and interest rate spreads diminish, the overall profitability of thrifts will be squeezed. One optimistic note about the thrifts' financial performance in 1992, however, is that many of them used the unusually high profits to write off many of their bad loans and investments.

Measured on a book-value basis, the industry's capitalization has improved. Counting only tangible capital--that is, excluding in-

2. Thrifts include savings and loan institutions and some savings banks. The term used to be applied loosely to include all types of depository institutions that were not commercial banks. Once the thrift crisis began to unfold, thrifts came to be defined as institutions whose deposits were insured by the FSLIC or its successor, the Savings Association Insurance Fund. See Congressional Budget Office, *Reforming Federal Deposit Insurance* (September 1990).

tangible "goodwill," which includes a firm's reputation and relationships with suppliers and customers--the industry reached its nadir in 1984 (see Figure 1). Tangible capital equaled 4.9 percent of assets at the end of 1991 and 5.9 percent by the end of September 1992. On the basis of generally accepted accounting principles (GAAP), which include goodwill as part of an institution's capital, the industry's capitalization ratio bottomed out in 1987 at less than 3 percent. By the third quarter of 1992, the industry had improved its GAAP capitalization ratio to about 6.7 percent.

Figure 1.
Ratio of Capital to Assets in the Thrift Industry, 1980-1991



SOURCE: Congressional Budget Office based on data from the Federal Home Loan Bank Board and the Office of Thrift Supervision.

NOTES: GAAP capital is estimated for 1990. Tangible capital excludes goodwill.

GAAP = generally accepted accounting principles.

The distribution of thrifts among various levels of capitalization, as measured by book values of tangible capital and assets, has dramatically improved since 1988. As of September 30, 1992, more than two-thirds of the thrifts had a capitalization ratio greater than 6 percent, although these institutions held only about one-third of the industry's assets. About 96 percent of the industry's assets were

in institutions with tangible capital of more than 3 percent of assets. The number of institutions with capital less than 3 percent of assets had fallen to fewer than 100.

The improvements shown by these data suggest that the thrift cleanup program has had some success. Government regulators have removed the most poorly capitalized institutions from the industry and have thereby improved the chance that better-capitalized and better-run institutions will survive. Part of the improvements, however, have come about for other reasons: real estate prices, which have an important effect on the value of thrifts' assets, are less of a cause for concern than they once were; declining interest rates, and the widening spread between borrowing and lending rates that has accompanied them, have improved short-run profits; the spread of financial problems to banks, one of the thrifts' chief competitors, has improved the relative position of thrifts; and the ability of the managers and owners of some thrifts to adopt strategies such as downsizing and targeting niche markets has improved their competitiveness and survivability.

What Remains to Be Done?

Perhaps the most important task facing those charged with responsibility for resolving the crisis is to ensure that the factors that helped cause the initial collapse of the thrift industry are held in check. As discussed in Chapter 2, some of these factors are beyond anyone's control, but many others can be contained by sound policies and actions by those who administer them.

One of the responsible agencies is the Office of Thrift Supervision (OTS), whose job is to regulate thrifts. Part of this job entails determining when thrifts are no longer solvent--that is, when they can no longer service their debts and pay their depositors. Prompt clo-

sure of insolvent institutions can save the deposit insurance funds substantial amounts of money.

When the OTS determines that a thrift must be liquidated or sold to another firm (that is, be resolved), it typically places it into the care, or conservatorship, of the Resolution Trust Corporation (RTC), which like the OTS is an agency created by FIRREA. The role of the RTC is to make sure that all of the thrift's insured depositors are paid the amounts due them and that the government recovers as much of the value as possible from the thrift. It does this in different ways. In a very few cases, the RTC sells an institution whole; depositors' balances are transferred to the acquiring institution, and the RTC recoups the amount that the institution was willing to pay for the thrift. In most cases, the transaction is much less clean. As discussed in Chapters 4 and 5, RTC resolutions can usually

be thought of as having two parts: the sale or liquidation of the institution, and the disposal of its assets. These transactions are extremely complicated. How they are carried out will ultimately determine the final cost of resolving the thrift crisis.

Given the recent improvement of the thrift industry and declarations by the OTS that it is close to completing the closure of troubled thrifts, some experts are arguing that the RTC should be allowed to complete its task without further reform of the resolution process. But even if most failed thrifts have been closed, disposing of its inventory of assets and terminating its hundreds of receiverships will probably take the RTC until the end of the decade. Thus, options for improving the RTC's disposal process could potentially yield cost savings. Several options for improving the efficiency and effectiveness of the RTC are discussed in Chapter 6.

Origins of the Thrift Crisis

The thrift crisis grew out of a confluence of events and institutional structures that, in retrospect, seem designed for disaster. In 1980, however--before the industry began to unravel--all seemed well. Thrift institutions were performing their traditional role of accepting money for deposit in accounts insured by the Federal Savings and Loan Insurance Corporation and lending funds for mortgages and other purposes. At the end of 1980, the FSLIC insured the deposits of 3,993 thrift institutions with assets of \$604 billion.

By the end of September 1992, the number of thrifts had declined to 1,954, but the dollar value of assets had grown to \$816 billion. Most of this consolidation came through government closure rather than voluntary merger. More than 1,100 thrifts were resolved in the 13 years from 1980 through 1992 (see Table 1). They were resolved at a cumulative nominal cost to the government of about \$130 billion (estimated on a net present-value basis at the time of resolution), or approximately \$134 billion in 1990 dollars.¹

1. From 1980 through the third quarter of 1992, the number of thrifts shrank by 2,039. Of these, 1,142 were closed and resolved at a cost to either the FSLIC or the Resolution Trust Corporation, and 69 thrifts were operating in RTC conservatorships awaiting resolution. From 1980 through 1988, 333 failed thrifts left the industry through "supervisory mergers." Although they left at no direct cost to the FSLIC, the Federal Home Loan Bank Board incurred indirect expenses to arrange the mergers.

One should not assume that the balance (495 thrifts) left the industry at no cost. From 1980 through the third quarter of 1992, approximately 1,500 thrifts left through mergers at no cost to the government, and about 700 entered the industry. Because some mergers and new entrants later resulted in further mergers or government closures, it is difficult to determine how many thrifts left at no cost to the government.

Resolving a failed thrift generally takes longer than one year. In any year, therefore, the net losses associated with resolutions were reported on an estimated present-value basis. This estimate projected the net present value of current and future outlays and receipts for thrifts resolved that year. Because the estimate was a present value of the FSLIC's cost for that year's resolutions, the reported cost is in that year's dollars but on a present-value basis. A real comparison of the FSLIC's costs in two or more years requires adjusting these annual expenditures for differences in the price level over the time period.

Causes of the Thrift Crisis

A number of economists have evaluated the causes of the thrift industry's woes.² They attribute it to at least eight factors:

1. Rigid institutional design of thrifts;
2. Increased competition in the financial services industry;
3. High and volatile interest rates in the late 1970s and early 1980s;

2. See, for example, James R. Barth, *The Great Savings and Loan Debacle* (Washington, D.C.: American Enterprise Institute Press, 1991); R. Dan Brumbaugh, Jr., *Thrifts Under Siege* (Cambridge, Mass.: Ballinger Publishing Co., 1988); Edward J. Kane, *The Gathering Crisis in Federal Deposit Insurance* (Cambridge: MIT Press, 1985); Edward J. Kane, *The S&L Insurance Mess: How Did It Happen?* (Washington, D.C.: Urban Institute Press, 1989); and Lawrence J. White, *The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulation* (New York: Oxford University Press, 1991).

4. Deregulation;
5. Moral hazard and the deposit insurance system;
6. Fraudulent practices;
7. Deterioration in credit quality (especially real estate assets);
8. Changes in the tax law.

Some of these factors were one-time events that are unlikely to be repeated, such as the change in interest rate regimes in the late 1970s and early 1980s, the legislated deregulation of the thrift industry, and changes in tax law. Other factors, most notably the deterioration in credit quality and, again, the change in interest rates, reflect changing macroeconomic conditions. These events also may not be repeated. Certain factors, how-

Table 1.
Estimated Cost of the Thrift Crisis

Year	Number of Thrifts Resolved		Cost of Resolution ^a			
			Millions of Current Dollars		Millions of 1990 Dollars	
	Yearly	Cumulative	Yearly	Cumulative	Yearly	Cumulative
1980	11	11	166	166	264	264
1981	28	39	760	926	1,106	1,370
1982	63	102	806	1,732	1,104	2,474
1983	36	138	275	2,007	361	2,835
1984	22	160	743	2,750	935	3,770
1985	31	191	1,022	3,772	1,242	5,012
1986	46	237	3,066	6,838	3,654	8,666
1987	47	284	3,704	10,542	4,258	12,924
1988 ^b	205	489	35,790	46,332	38,361	51,285
1989	37	526	4,899	51,232	5,164	56,449
1990	316	842	38,383	89,614	38,383	94,832
1991	232	1,074	33,833	123,447	32,429	127,261
1992	68	1,142	7,172	130,619	6,644	133,905
1993-1998 ^c	n.a.	n.a.	51,000	181,619	41,700	175,605

SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board, the Federal Savings and Loan Insurance Corporation, and the Resolution Trust Corporation.

NOTE: n.a. = not available.

- a. The estimated cost of resolution excludes any tax benefits that the FSLIC either sold to acquirers or retained. In 1988, the FSLIC estimated these tax benefits to total about \$5.6 billion.
- b. At least two factors undermine attempts to score accurately the cost of resolving thrifts in 1988. First, the General Accounting Office reported in 1990 that the FSLIC's present-value cost estimate of \$31,790 million for the 205 FSLIC/Bank Board resolutions (which the Bank Board revised upward in July 1989 from the \$31,180 million reported in January 1989) was underestimated by \$2 billion to \$4 billion. Second, the Bank Board was unable to complete before the end of the year 18 of the resolutions it initiated. These uncompleted resolutions were unofficially called "stabilizations." As of December 31, 1988, the 18 stabilizations had assets of \$7,463 million and tangible net worth of negative \$3,348 million, and were estimated to have a present-value resolution cost of \$6,838 million. The RTC resolved these stabilizations, but much of their cost was charged to the FSLIC Resolution Fund, which, with the exception of stabilizations, is responsible for completing receiverships from resolutions done before 1989. Those costs are not reported here for 1988 or subsequent years; the RTC reported resolution of the stabilizations when they were done, but reported only that portion of the cost not charged to the FSLIC Resolution Fund. Current estimates for the FSLIC Resolution Fund suggest a cumulative cost of \$60 billion in 1990 dollars for pre-1989 resolutions and the 18 stabilizations, which could raise the cost of 1988 resolutions by as much as \$9 billion in 1988 dollars.
- c. Projected. Underlying CBO's projections is the estimate that between 200 and 400 thrifts will be resolved at a cost to the RTC or the Savings Association Insurance Fund during fiscal years 1993 through 1998. The number of projected thrift resolutions and their costs ignore thrifts that were rechartered as banks after 1988 but whose deposits the SAIF insures. Costs to resolve any of these so-called "Oakar thrifts" are initially charged to the Bank Insurance Fund and scored as BIF resolutions, but the costs are subsequently reapportioned to the SAIF.

ever, continue to operate and to affect the choices that both thrifts and their regulators make. These factors--primarily increased competition, moral hazard, and, despite being less rigid, the institutional design of thrifts--are amenable to policy actions that could restrain the potential of these factors to prolong the problems of the thrift industry.

Rigid Institutional Design

Before the 1980s, thrifts had a very rigid institutional design. Regulations enacted in the 1930s in response to the bank and thrift crises of the Great Depression limited both the types of investments thrifts could make and the way they could attract funds to finance these investments. For example, regulations encouraged thrifts to provide housing finance. In so doing, the regulations permitted and even encouraged thrifts to "borrow short and lend long"; that is, thrifts made mortgages at fixed interest rates for long periods of time, generally up to 20 to 30 years, and financed them with deposits and other borrowings with far shorter maturities that customers could withdraw on demand or with as little as 30 days' notice. No other industrial country's private-sector depositories finance housing with such risky financial instruments as fixed-rate, long-term mortgages.³ Although this policy fostered homebuilding in the postwar economy, it also set the stage for the financial calamity of the 1980s.

Lending long and borrowing short made thrifts especially sensitive to interest rate risk--that is, the risk that short-term rates would rise above long-term rates for extended periods of time. If interest rates increased above the average rate that mortgages in thrift portfolios were yielding, then the higher borrowing costs would cause thrifts to suffer losses. Thrifts could charge higher interest rates on new mortgages that they originated,

but in general the market repriced (changed the interest rate of) their liabilities--deposits and other borrowed funds--at the higher rate far faster than thrifts could reprice their investments. If thrifts did not reprice liabilities by increasing their offer rates on deposits, depositors would withdraw their funds--a process referred to as disintermediation.⁴

In the 1930s, the government adopted a number of policies to protect thrifts from interest rate risk and encourage the form of housing finance described above. The Federal Home Loan Banks offered loans to thrifts that were members of the Federal Home Loan Bank System. The Federal Home Loan Banks collateralized these advances with mortgages held by the thrifts. Because the advances encouraged more housing finance, the rates charged were typically low relative to what thrifts had to pay for deposits. In addition, the Federal Home Loan Bank Board could use the advances to provide liquidity to thrifts if interest rates increased to such an extent that depositors withdrew their money.

Another policy was to control the rate of interest that commercial banks could pay on deposits. The intent was to limit price competition for deposits and thus make available a supply of low-cost funds to banks. Under Federal Reserve Regulation Q, commercial banks were prohibited from paying interest on demand deposits and were limited in the interest rates they could pay on savings deposits (deposits that pay interest but do not have a fixed term of maturity) and time deposits (deposits that pay interest and have a fixed maturity). These controls on interest rates benefited thrifts by limiting their chief competitors' ability to offer higher rates on deposits.

The Interest Rate Adjustment Act of 1966, enacted in response to the first post-World War II credit crunch, extended the regulation

3. See, for example, John Lomax, "Housing Finance--An International Perspective," *Bank of England Quarterly Bulletin*, vol. 31, no. 1 (February 1991).

4. More broadly, disintermediation occurs when savers directly invest their funds with borrowers rather than place them with financial intermediaries. The term also refers to funds being intermediated by financial institutions other than depositories.

of interest rates to thrifts. The ceilings were structured so that thrifts had a slight advantage over commercial banks in competing for savings and time deposits.⁵ Commercial banks already enjoyed a competitive advantage because they had a virtual monopoly on offering demand deposits. Since banks and thrifts in the 1960s were still the major competitors for funds in the deposit-type market, regulators assumed, or hoped, that limiting competition for the funds would not disrupt their supply.

Increased Competition

Controls on interest rates did not, however, restrict the rates that nondepository financial institutions offered. This competitive difference was not a problem for thrifts as long as nondepositories controlled only a small share of the financial services market. Regulations adopted in the 1930s and in later years strengthened the artificial separation already existing among financial firms (depositories, insurance firms, investment banks, and securities dealers) and among different types of depositories (commercial banks, thrifts, and credit unions). The separation was established by limiting the investment activities and sources of funds of depositories and other financial institutions. As long as the separation could be maintained, financial markets remained stable. This separation, however, was difficult to maintain because financial institutions developed new products that circumvented regulations.

During the 1970s, competition heightened within the financial services industry. Cross-competition came both from other types of depositories and from nondepository financial institutions. For example, commercial banks substantially expanded the marketing of consumer lending products, including residential

mortgages, that had been the domain of thrifts and credit unions. Nondepository institutions increased their share of the market for both lending and deposit-type activities. In the 1970s, thrifts as well as credit unions and money market mutual funds offered interest-paying checking accounts that eroded the monopoly commercial banks had for these deposits. Competition was viewed as being socially desirable insofar as the result was lower consumer prices for financial services. The increased competition, however, squeezed profit margins and threatened the viability of some types of financial institutions, particularly the heavily regulated thrifts.

High and Volatile Interest Rates

Although the rigid institutional design and increased competition would have caused problems for thrifts in any case, it was the changes in interest rates that triggered the thrift crisis. The ceilings imposed by Regulation Q permitted thrifts to compete effectively for deposits as long as market interest rates were stable and not far above the ceilings. Although similar services offered by nondepositories jeopardized this stability, their development did not cause serious problems until the 1970s. High inflation during that decade, however, prompted the Federal Reserve to conduct restrictive monetary policy, which led to the high and volatile interest rates of the late 1970s and early 1980s.

The interest rate fluctuations were a manageable problem for institutions that were not subject to rigid asset restrictions, such as commercial banks, but they created substantial problems for thrifts.⁶ Thrifts had total net operating losses (those associated primarily with adverse interest rate spreads) of \$7.1 billion in 1981 and \$8.8 billion in 1982. For the two years combined, thrifts paid \$15.9 billion more for deposits, other borrowings, and op-

5. Thrifts were permitted to offer slightly higher interest rates to their depositors than were commercial banks. Just before the phaseout of Regulation Q, this difference was 25 basis points (that is, one-quarter of one percentage point) on savings deposits.

6. Commercial banks are restricted in the types of investments that they make, but most of their loans had a short term.

erating expenses than they were earning in interest from their investments. In 1982, 85 percent of thrifts reported negative net income, and two-thirds were considered to be insolvent when their assets and liabilities were valued at market prices.

Deregulation

The Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St Germain Depository Institutions Act of 1982 changed the regulation and institutional design of thrifts in part to address the problems of increasing competition and high and volatile interest rates. In combination, the two acts greatly deregulated thrifts, phasing out interest rate ceilings on deposits and permitting thrifts to engage in a wider variety of investment activities. Several states also afforded their chartered thrifts more liberal investment options. The primary argument for removing restrictions on investments was to enable thrifts to diversify their investments and thus reduce the overall level of their portfolios' interest rate risk.

The deregulation in the early 1980s is commonly cited as a contributing cause of the thrift crisis. The problem was not necessarily deregulation itself, but its poor timing. Many economists believe that the deregulation came too late. To most economists, it was a necessary and appropriate response to the apparent problems of interest rate risk, and it fostered fairer competition in financial services. The problem was that the sharp rise in interest rates in the late 1970s and early 1980s had resulted in large declines in the value of long-term, fixed-rate mortgages and had caused most thrifts to become significantly undercapitalized. This undercapitalization, which was not recognized immediately by standard book-value accounting measures, set the stage for disaster as regulators allowed many imperiled thrifts to continue in business unchecked.

Moral Hazard and Deposit Insurance

Had there not been a government-backed system of deposit insurance, fewer depositors would have invested their funds in undercapitalized thrifts, and many of those thrifts would have been forced to raise additional capital or cease operations. Moreover, depositors who had unprotected deposits at a thrift that became economically insolvent would have had a strong incentive to withdraw their funds, which would have forced the thrift to close. But deposit insurance, another Depression-era law, removed the incentive for depositors to care about the financial health of their thrift. The establishment of deposit insurance in the 1930s guaranteed that, up to a specified limit, depositors' funds were safe. If a thrift failed, deposits covered by government deposit insurance would be paid regardless of the riskiness of the institutions holding the deposit.

Deposit insurance was not a problem so long as moral hazard was contained.⁷ Moral hazard is the incentive created by insurance that induces those insured to undertake greater risk than if they were uninsured; the insured party has less of an incentive to protect itself against risk if potential losses associated with that risk are guaranteed by another party. The U.S. system of deposit insurance addressed the risk of moral hazard through regulation and prudential supervision aimed at containing it.

Most economists agree that the thrift crisis was exacerbated by problems directly associated with moral hazard.⁸ Thrifts had an in-

7. For a fuller discussion of moral hazard, see, for example, Congressional Budget Office, *Reforming Federal Deposit Insurance* (September 1990).

8. James R. Barth and Philip F. Bartholomew, "The Thrift-Industry Crisis: Revealed Weakness in the Federal Deposit Insurance System," in James R. Barth and R. Dan Brumbaugh, Jr., eds., *The Reform of Federal Deposit Insurance* (New York: Harper Business, 1992); George
(Continued)

centive to engage in increasingly risky activities as their net capital fell and they had less to lose. Several studies have analyzed the behavior of thrifts with regard to changes in their portfolio of investments and concluded that these changes reflect the moral hazard incentives.⁹

Moral hazard would have been a less serious problem if regulators had operated the system as designed, but they did not adequately manage the exit of thrifts from the market. Mistakenly thinking that thrifts could recover from what was viewed as a temporary problem in the early 1980s, regulators permitted thrifts that were insolvent--as measured on almost any accounting standard--to remain open. Having been granted this regulatory forbearance, many economically insolvent thrifts engaged in speculative investments of various types, some of which had first been permitted by deregulation in the early 1980s. Some undercapitalized thrifts did not make speculative investments, but they did not have sufficient capital to withstand sharp recessions in their market areas.

In debating the establishment of deposit insurance in the 1930s, many opponents had argued that the moral hazard it would create would cause depository institutions to fail. Such a failure did not happen until other causes of the thrift crisis, in particular the decline in capitalization resulting from the sharp rise in interest rates, created incentives

for owners and managers of thrifts to undertake imprudent levels of risk.

Deposit insurance by itself need not have led to a financial calamity. Had the regulators been stricter in containing moral hazard, deposit insurance might have continued to promote stability in the thrift industry. In fact, moral hazard and deposit insurance must be cited as major culprits in the thrift crisis because regulators permitted undercapitalized and insolvent thrifts to operate and because deposit insurance severs the connection between an institution's risk and the price it pays for funds.

Fraud

Much has been written about some egregious cases of fraud in the thrift industry, but most commentators regard fraud as symptomatic of the moral hazard created by deposit insurance.¹⁰ Some thrift owners, directors, and managers were merely negligent in pursuing risky investment strategies that were made easier by the federal and state deregulation of investment powers, but many committed outright fraud.

After passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, the full extent of fraud during the thrift crisis became apparent. The Resolution Trust Corporation estimated that fraud and abuse contributed to the failure of 234 of the 677 thrifts investigated by the RTC as of December 31, 1991.¹¹ As of that date, the RTC had referred 747 cases of suspected criminal action at 417 thrifts to the Department of Justice;

8. Continued

J. Benston and George G. Kaufman, "Understanding the Savings-and-Loan Debacle," *The Public Interest*, vol. 99 (April 1990); Elijah Brewer III, "Full-Blown Crisis, Half-Measure Cure," *Economic Perspectives*, Federal Reserve Bank of Chicago (November/December 1989); R. Dan Brumbaugh, Jr., and Andrew Carron, "Thrift Industry Crisis: Causes and Solutions," *Brookings Papers on Economic Activity*, no. 2 (1987); Kane, *The Gathering Crisis in Federal Deposit Insurance*; Kane, *The S&L Insurance Mess: How Did It Happen?*

9. See, for example, James R. Barth, Philip F. Bartholomew, and David A. Whidbee, "How Damaging Was Moral Hazard?" *Federal Home Loan Bank Board Journal*, vol. 18, no. 8 (August 1989); and Brewer, "Full-Blown Crisis, Half-Measure Cure."

10. Several books detail anecdotes of fraud during the thrift crisis. See Martin Low, *High Rollers: Inside the Savings and Loan Debacle* (New York: Praeger, 1991); Martin Mayer, *The Greatest-Ever Bank Robbery* (New York: Scribners, 1990); Paul Zane Pilzer, with Robert Dietz, *Other People's Money: The Inside Story of the S&L Mess* (New York: Simon and Schuster, 1989); Stephen Pizzo, Mary Fricker, and Paul Muolo, *Inside Job: The Looting of America's Savings and Loans* (New York: McGraw-Hill Publishing, 1989).

11. See Resolution Trust Corporation, "Report on the Progress of Investigations of Professional Conduct" (1992).

others had referred an additional 1,295 cases of suspected criminal action. Some of the more egregious cases were publicly scrutinized, but many cases could not be dealt with either because of a lack of resources or because the cost of prosecution outweighed the expected civil awards or criminal restitution. The General Accounting Office (GAO) reported in 1992 that by the end of January 1992, the federal government had collected only \$365,000 out of \$84 million in court-ordered fines and repayments in 55 major savings and loan convictions. GAO also testified that no one in the federal government is keeping track of how much is collected.¹²

Even so, it is difficult to ascertain that fraud was the primary cause of the failure of any individual thrift. Most analysts of the thrift crisis agree that although fraud may have caused comparatively few failures, it contributed to the failures and was a significant factor in the total cost of the cleanup.¹³

Deterioration in Credit Quality

Whatever the cause--negligence, fraud, or managerial incompetence--many thrifts made poor investments in the 1980s. Following federal and state deregulation in the early 1980s, thrifts were permitted to invest in many assets in addition to traditional residential mortgages. Within prescribed limits, they were permitted to make consumer and commercial loans and to take equity positions

in some investments. These direct investments were generally limited to purchases of residential or commercial properties.

Many of the losses on thrift investments--both equity investments and traditional loans--were caused by collapsing commodity prices, basically energy prices, in the Southwest. As the economy in this region suffered a recession, there was a substantial drop in residential and commercial property values, which had boomed on speculation associated with the high energy prices of the 1970s. The drop in real estate values had two effects: it ruined many of the direct investments that thrifts had made in the region and it reduced the value of collateral held against many of the thrifts' mortgages.

The reduction in the value of collateralized assets in this way is referred to in banking circles as a credit quality problem. Many thrifts experienced this problem in the middle to late 1980s. Because of its manifestation during the mid-1980s--at about the same time as interest rates declined and then stabilized--many analysts have concluded that it represents a second stage of the thrift crisis (the first stage being attributed to initial interest rate changes and deregulation). In 1986, thrifts' net non-operating losses--the accounting measure that reflects write-offs of bad assets and is associated with credit quality problems--exceeded \$1 billion. In 1987 and 1988 combined, thrifts had net non-operating losses of \$19 billion. These losses on assets resulted in negative net income of about \$20 billion even though thrifts actually earned some \$3.7 billion in net operating income.

Although thrifts in the Southwest suffered extensively, problems with credit quality were not confined to that region.¹⁴ Many thrifts invest their funds nationwide. Moreover, prob-

12. See the statement of Harold A. Valentine before the Subcommittee on Consumer and Regulatory Affairs of the Senate Committee on Banking, Housing, and Urban Affairs, February 6, 1992.

13. See, for example, the statement of James R. Barth before the House Committee on Banking, Finance and Urban Affairs, April 11, 1990. In his testimony, Barth argued that the presence of fraud significantly contributed to the cost of resolving thrifts, but that these costs were only a small (10 percent) portion of the overall cost. His testimony was based on an analysis of 1988 thrift resolutions for which data on fraud were available. See also James R. Barth, Philip F. Bartholomew, and Carol J. Labich, "Moral Hazard and the Thrift Crisis: An Empirical Analysis," *Consumer Finance Law Quarterly Report*, vol. 44, no. 1 (Winter 1990). Other commentators have provided estimates of costs resulting from fraud ranging from as little as 3 percent to as much as 25 percent.

14. This point is illustrated by the distribution of thrift resolutions and their costs by state. Although Texas and California are the states with the most thrift resolutions and the highest resolution costs, Florida, Louisiana, Illinois, Ohio, New Jersey, and New York also had a substantial number of failures and high costs. Data on the distribution by state of thrift resolutions and resolution costs are contained in Tables C-3 and C-4 in Appendix C.

Box 1. Insolvency and How It Is Measured

An organization becomes insolvent when its net worth--assets minus liabilities--is negative. Measuring when an institution becomes insolvent is a key aspect in determining when regulators should close an insured depository (a thrift or banking institution).

Economists prefer to measure insolvency on the basis of the market value of assets and liabilities. To determine these market values, the economist recognizes all explicit and implicit sources of value and claims associated with an institution.

Accountants prefer to use book values rather than market values to measure insolvency because many categories of assets and liabilities are difficult to measure on a market basis. Book values represent adjusted or unadjusted historical values. Rules that dictate accounting definitions or measurements are what accountants refer to as generally accepted accounting principles (GAAP).

Overlaying the question of whether to measure insolvency on a book- or market-value basis is whether to count only tangible assets or to include intangibles, such as goodwill. Measuring assets on the basis of so-called tangible accounting principles (TAP) means counting

only tangible property that can be accurately appraised, such as cash, securities, and physical property. GAAP records both tangible and intangible assets.

The most significant intangible asset institutions typically have is goodwill, which represents the value of a firm as an ongoing concern. Elements of goodwill include the firm's favorable name and reputation and its existing relationships with both suppliers and customers. Goodwill may be recorded on an institution's balance sheet as an asset that reflects the implicit value of these elements paid for by an acquiring firm during a merger.

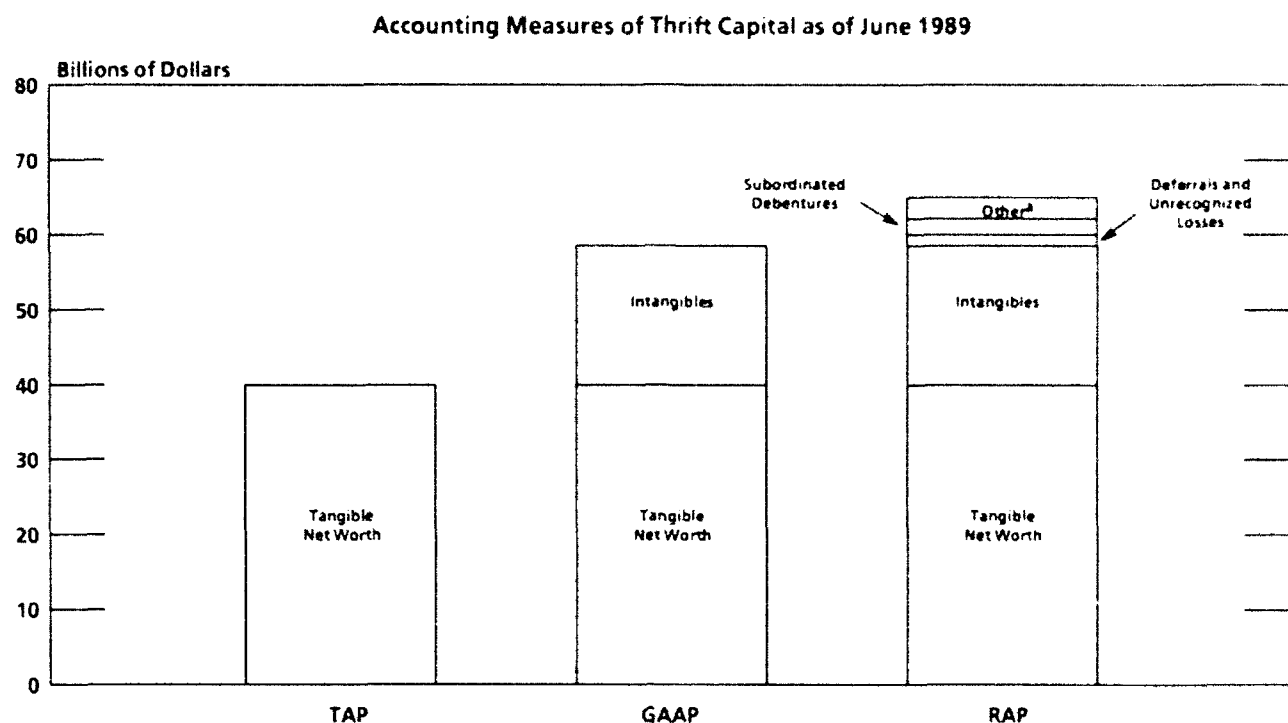
The accompanying figure shows the differences in accounting measures of thrift capital as applied to the combined balance sheets of all solvent thrifts in 1989. As shown, tangible net worth (assets minus liabilities) is simply equal to GAAP-reported net worth minus intangibles. Also included in the figure is an accounting practice known as RAP (regulatory accounting practice), a measure used by thrift regulators that had the intended effect of allowing institutions to count as capital more items than GAAP allowed. These extra items included subordinated debt, deferred and unrecognized losses, and other accounting categories.

lems with credit quality have been and will continue to be experienced in other regions.

Changes in the Tax Law

Another factor contributing to the credit quality problems that affected thrifts nationally was changes in tax law. Because these changes represented an abrupt switch in course and were not fully anticipated by real estate markets or thrift lenders, a number of analysts consider them to be an important additional cause of the thrift crisis.

The Economic Recovery Tax Act of 1981 increased both the tax benefits that applied to the depreciation of real estate and the profitability of investments in real estate. The Tax Reform Act of 1986, however, reduced the depreciation benefits to individuals investing in residential and commercial property, limited the offsetting passive losses on existing and prospective real estate investments (depreciation-related), and eliminated favorable capital gains treatment. These 1986 changes in the federal tax law adversely affected property values and contributed to the credit quality problem.



SOURCE: Congressional Budget Office using data from James R. Barth, Philip F. Bartholomew, and David A. Whidbee, "Higher Capital Requirements and the Restructuring of the Thrift Industry" (paper presented at the Annual Meeting of the National Association of Business Economists, San Francisco, California, September 1989)

NOTES: Figure applies to thrifts that were solvent according to generally accepted accounting principles as of June 1989

TAP = tangible accounting principles; GAAP = generally accepted accounting principles; RAP = regulatory accounting practice.

- a. Includes pledged deposits, qualifying certificates, appraised equity, unamortized deferred gains, gains or losses on futures transactions, loan origination fees, accounting forbearances, and general valuation allowances

The Response to the Thrift Collapse in the 1980s

Although the eight factors described above are the major contributors to the collapse of the thrift industry, the enormous size and scope of that collapse probably stemmed primarily from the failure of thrift regulators to respond appropriately to the state of the industry and

the confluence of events during the 1980s. Throughout that decade, thrift regulators engaged in reactive policies that were in many cases exactly the opposite of what, in retrospect, they should have done. To appreciate both the task of cleaning up the thrift crisis and the legislation enacted to prevent its recurrence, it is important to review the inept response of the regulatory system. Much of this response was well intentioned but, with the benefit of hindsight, can be judged a failure.

Regulatory Failure During the Thrift Crisis

Federal thrift regulators interpreted their goals as being both to promote and to supervise the thrift industry. These two objectives conflict if promoting the industry means reducing prudential supervision. And supervision was lax. Regulators did not resolve thrifts or force them to recapitalize when they failed economically. These delays led to more thrift failures and increased the ultimate cost of resolving the crisis.

The principal manifestation of regulatory laxity was the practice of forbearance, the discretionary practice of liberalizing or not enforcing an existing rule. In the 1980s, thrift regulators elevated forbearance to a general policy for the entire industry; they did not close institutions when they became insolvent—that is, when their liabilities were greater than their assets. (See Box 1 on pages 12 and 13 for a fuller definition of insolvency and how it is measured.) Regulators did not violate statutes; rather, they interpreted those statutes in the most liberal way possible, thereby postponing the closing of insolvent institutions.

The high and volatile interest rates of the early 1980s threatened the economic viability of almost the entire thrift industry. In 1980, only 43 thrifts were allowed to remain operating while insolvent on a tangible accounting basis—that is, excluding intangible assets such as goodwill from the calculation (see Box 1). For 1981 and 1982 combined, the thrift industry reported aggregate net after-tax losses of \$8.7 billion. In 1982, approximately 85 percent of all thrifts reported negative net income, and the number of thrifts that reported insolvency on a tangible accounting basis swelled to 415. Many more were insolvent if their interest rate risk was considered. Regulators responded, albeit weakly, to this initial portion of the collapse; the number of annual

thrift resolutions more than doubled between 1981 and 1982, from 28 to 63.

As described above, much of the initial problem was attributed to the high and volatile interest rates. In 1983, many experts argued that when interest rates declined, as anticipated with the expected economic recovery and the reduction in inflation, thrifts would recover.¹⁵ Indeed, the industry experienced positive net after-tax income for the years 1983 through 1986. Moreover, net operating income (that associated with interest rate spreads) was only slightly negative for the industry in 1983 and was positive and substantially improving for 1984 through 1985.

The combined effects of the statutory deregulation in the early 1980s and the slower interest rates in the mid-1980s were expected to take some time to improve the viability of the thrift industry. Thus, some observers argued that regulators should not necessarily close troubled thrifts as quickly as strict accounting measures of solvency would indicate. At first they noted that financially troubled thrifts would benefit from a reduction in interest rates. Some did. Of the 112 thrifts that were insolvent on a tangible accounting basis in 1981, 16 were restored to solvency in 1982. Of the 415 thrifts that were tangibly insolvent in 1982, 51 were restored to solvency in 1983.

By the mid-1980s, thrift regulators had a new argument—that troubled thrifts should not be closed but rather be afforded the opportunity to "grow out of their problems." Of course, the regulators did not anticipate the sharp decline in energy prices. Even after it occurred, they did not expect the collapse of energy prices to affect the credit quality of southwestern thrifts to the degree that it did. Thrifts that had restored their interest rate

15. See Federal Home Loan Bank Board, *Agenda for Reform* (1983).

spreads now suffered from a reduction in their asset values resulting from poor credit quality.

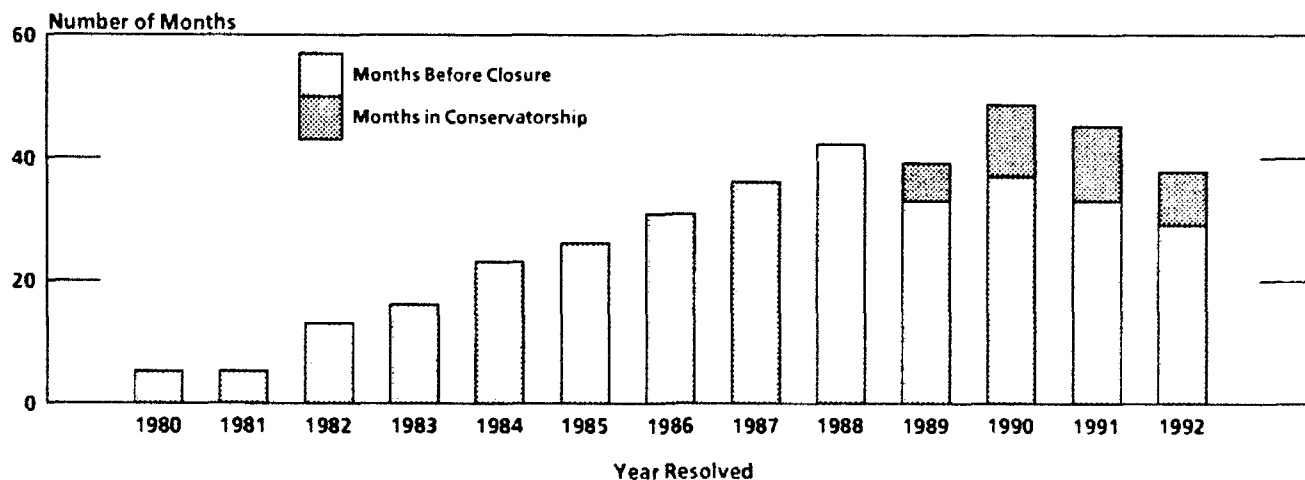
It may be unfair now to criticize regulators for their hope in the 1980s that more favorable conditions for interest rates and less restrictive controls on investment would prompt the thrift industry's recovery. Nonetheless, regulators ignored the problem of moral hazard inherent in deposit insurance and did not adequately monitor and supervise thrifts.

Moral hazard was, in theory, partially contained by regulatory supervision and by capital requirements, which assured the government that thrift owners had an equity stake at risk if their institution suffered losses. Because of the policy of regulatory forbearance, however, capital at thrifts shrank both in absolute terms and in proportion to the assets these thrifts controlled. In 1980, the thrift industry had a capital-to-asset ratio of approximately 5 percent--measured both on a tangible basis and according to generally accepted accounting principles. By 1982, average capitalization fell to 3 percent on a GAAP basis for

the industry, or to 0.6 percent measured on a tangible basis. Thus, many owners and managers had an inescapable incentive to "gamble for resurrection" by making risky investments. If their gambles succeeded, the owners and managers benefited. If they failed, they lost only a small amount or nothing if they were already insolvent--the insurer would pay off the depositors.

Thus, regulatory forbearance permitted the further deterioration of capital ratios. By not closing insolvent thrifts or by not forcing them to recapitalize, the regulators exacerbated the problem. The threat of moral hazard might have been contained by intensified prudential supervision, which includes monitoring thrifts and enforcing regulations, but regulators appear to have been more concerned with permitting thrifts the opportunity to recover. Moreover, the deregulation of the early 1980s was accompanied by less stringent supervision. Policymakers mistakenly believed that thrifts needed less government supervision in order to exert their true entrepreneurial spirit. Forbearance therefore set the stage for speculative investment and fraudu-

Figure 2.
Average Number of Months That Thrifts Were Tangibly Insolvent Before Resolution, 1980-1992



SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board and the Office of Thrift Supervision.

NOTE: Before 1989, thrifts were resolved when closed. After 1989, most thrifts were first placed in RTC-controlled conservatorships.

lent practices, both of which added to the ultimate cost of resolving failed thrifts.

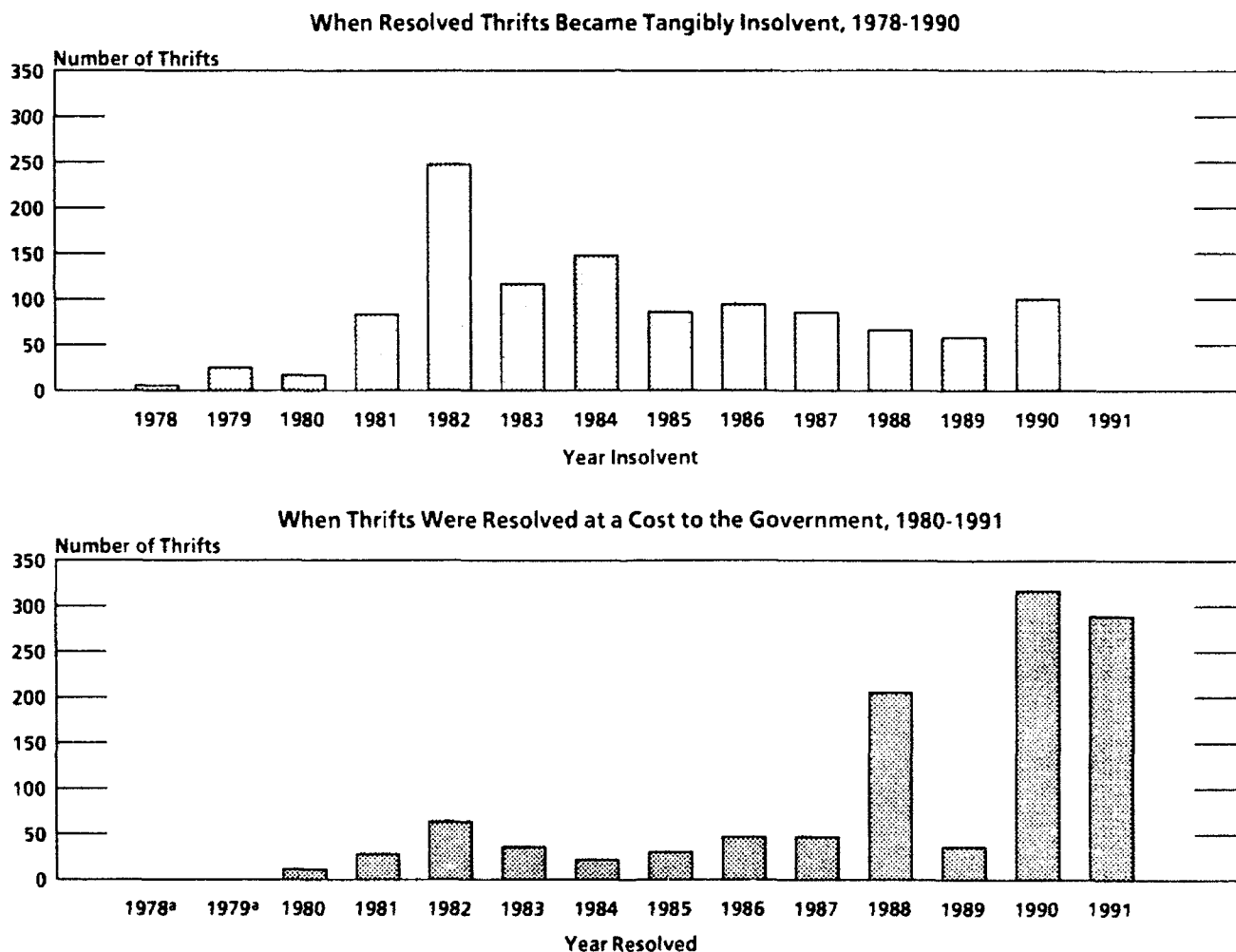
Consequences of Delaying Closure and Resolution

Thrifts were not closed in a timely fashion and were allowed to remain open for progressively longer periods. Thrifts resolved in 1980 had been tangibly insolvent for an average of only

about five months. By 1988, however, resolved thrifts had been insolvent an average of more than three years--some for as long as 10 years (see Figure 2 on page 15). On a market-value basis, thrifts had been insolvent even longer.

The increase in the average number of months that thrifts had been tangibly insolvent before being resolved is evidence that thrift regulators were delaying closure and resolution. The delay in closure has continued

Figure 3.
Timing of Insolvency and Resolution, 1978-1991



SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board and the Office of Thrift Supervision

NOTE: Timing of insolvency and resolution was based on 1,130 thrifts that either were resolved during the 1980-1990 period or were projected in June 1991 to be resolved in 1991.

a. Data not available.

since FIRREA was enacted, although the average period that thrifts were insolvent before being placed in conservatorship in 1989 through 1992 is somewhat shorter than that for 1988.¹⁶ At the same time, with the exception of 1992, the average period from insolvency to resolution has increased. Delay in closure since 1989 may be attributable more to constraints placed on the RTC's resources than to conscious decisions to let thrifts grow out of their problems. These constraints affected both the funding and the manpower available to the RTC. As will be discussed in Chapter 4, however, some policies pursued by the Office of Thrift Supervision may have contributed to further delays.

The timing of thrift closures would have been different if thrifts that were resolved during the period from 1980 through 1990 (and those projected to be resolved in 1991) had been closed when they became tangibly insol-

vent rather than when they were resolved (see Figure 3). The collapse of the thrift industry would have been unquestionably apparent in 1982 rather than late in the 1980s. Except for 1982, when the thrifts' books finally reflected the adverse effects of the high and volatile interest rates, the pace of closures would have been smoother but at higher levels.

CBO estimates that the delay in closing failed institutions roughly doubled the ultimate cost of resolving them.¹⁷ Although it is not clear that all costs of delay could have been avoided, costs associated with moral hazard could have been better contained if regulators had closed failed thrifts earlier. Given that more conservative book-value measures of insolvency were available, such as those obtained using GAAP or measuring capital on a tangible basis, earlier closure and resolution were possible.

16. Calculations of the delay in closing failed thrifts since FIRREA should account for the time a failed thrift spent in conservatorship. Losses during conservatorship presumably result from decisions made by managers and owners before takeover. Although the average delay for thrifts resolved by the RTC was three to four years when measured from the time the thrift first became tangibly insolvent until it was resolved, delay averaged two to three years when measured until the time thrifts were placed into conservatorship.

17. See Congressional Budget Office, "The Cost of Forbearance During the Thrift Crisis," CBO Staff Memorandum (June 1991). This analysis examined thrifts that had been resolved through 1990 and those projected to be resolved in 1991. Recent analysis, which looked at all thrifts that failed regulatory capital standards in 1979 and compared their projected cost of resolution with actual costs of those of the group that ultimately failed, confirms CBO's analysis. See Ramon P. DeGennaro and James B. Thomson, "Capital Forbearance and Thrifts: An Ex Post Examination of Regulatory Gambling" (Federal Reserve Bank of Cleveland, 1992).

Response to Regulatory Failure: FIRREA

By the beginning of 1989, it was clear that action was needed to clean up the thrift industry. The Federal Home Loan Bank Board closed and resolved 205 thrifts in 1988--almost as many as were closed during the previous eight years. Hundreds of thrifts were still reporting book-value insolvency, and private financial analysts estimated that hundreds more were market-value insolvent.¹ The Administration estimated that \$50 billion would be needed to clean up the problem, in addition to the more than \$40 billion that the Federal Savings and Loan Insurance Corporation had already committed to dealing with failed thrifts.

On February 6, 1989, President Bush proposed legislation to strengthen the regulation and cleanup of the thrift industry and ordered the Federal Deposit Insurance Corporation (FDIC) to administer those thrifts already in conservatorship until the proposed legislation could be enacted. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 became law on August 9, 1989.

FIRREA reformed numerous aspects of U.S. statutes governing the operation and regulation of financial institutions. Most relevant to this analysis are three of FIRREA's provisions. First, it established the purpose and objectives of the reform and in so doing set the framework for subsequent regulations and

policy decisions. Second, it created a new set of agencies and procedures for cleaning up the thrift industry. Third, FIRREA established how the cleanup would be paid for.

Purpose and Objectives of FIRREA

Title I of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 established 10 purposes of the legislation. In addition to creating the Resolution Trust Corporation as a temporary agency responsible for resolving failed thrifts, those objectives were to promote affordable housing finance, improve regulatory supervision, curtail risks to the federal deposit insurance funds, promote the independence of the FDIC, put the insurance funds on a sound financial footing, establish an Office of Thrift Supervision, provide funds to deal with failed depositories, strengthen the enforcement powers of federal regulators, and strengthen penalties for fraud. (See Box 2 for a review of some of the major regulatory reforms.)

None of the 10 stated purposes of the act, however, established a strategy for resolving the thrift crisis. Instead, that task was left to two agencies that oversaw and administered the RTC--the Federal Deposit Insurance Corporation and the Oversight Board. Somewhat ambiguously, but most relevant to this analysis, FIRREA offered some guidance to the RTC and those that promulgated the RTC's strate-

1. An overview of this juncture of the thrift crisis is contained in the testimony of M. Danny Wall before the Senate Committee on Banking, Housing, and Urban Affairs, March 1, 1989.

gy. The act stated that the RTC was established "to contain, manage, and resolve failed savings associations."

At the time it was enacted, FIRREA appeared to straddle opposing views on both the extent of the crisis and how it should be dealt with. As will be shown in subsequent chap-

ters, how one views the crisis has important implications for how one approaches its resolution and for the efficiency and effectiveness of the resolution effort.

To some observers, the crisis was a temporary phenomenon, exacerbated by thrift regulators. In 1989, these observers argued that

Box 2. Major Regulatory Reforms

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) contains major reforms of thrift regulation designed to help prevent further costly failures. It restricts the type and extent of activities in which thrifts can engage. In general, thrifts are prohibited from making any investment that threatens the financial security of the Savings Association Insurance Fund. Insured state-chartered thrifts are restricted to those activities permitted to federally chartered institutions. If the state-chartered thrift is adequately capitalized, however, the Federal Deposit Insurance Corporation may permit greater activity as long as the activity does not pose a threat to the deposit insurance fund.

Restrictions on Investment and Holdings. FIRREA also restricts insured thrifts' investment in low-grade equity securities known as junk bonds. Holdings of nonresidential and commercial real estate loans are restricted to an amount no greater than four times the thrift's level of capital. FIRREA reduces the amount a thrift may lend to a single borrower, and it effectively tightens loan-to-value requirements. The act also requires that a thrift meet minimum capital requirements in order to accept brokered deposits (that is, large deposits placed by brokers).

Stricter QTL Test. FIRREA tightens the qualified thrift lender (QTL) test, which sets a standard for advances made by the Federal Home Loan Banks. Currently, for a thrift to have access to such advances, 65 percent of its assets must be in qualified investments, primarily housing-related. Thrifts that fail to meet the QTL test must become a commercial bank or be limited to those activities permitted national banks.

Tighter Capital Standards. A major reform under FIRREA is the tightening of capital requirements, which were restored only to 1979 levels. All federal regulators of depository institutions must adopt rules that are no less stringent than those for national banks. The current requirement is that primary capital (which is equity), loan loss reserves, and some convertible debt and preferred stock must be at least 5.5 percent of total assets. In addition, total capital (which is primary capital plus subordinated debt and the remaining preferred stock) must be at least 6 percent of assets.

In compliance with the Basle Accord—an international agreement on uniform capital requirements for banks—risk-based capital requirements are being phased in as well. These capital rules require a bank to hold more capital if it invests in certain "risky" assets. In 1989, the Office of Thrift Supervision issued regulations for thrifts' capital requirements that are scheduled to be fully phased in by 1995. The ratio of tangible (that is, substantial and appraisable) capital to tangible assets must be no less than 3 percent, and the thrift must comply with primary, total, and risk-based capital requirements. Failure to meet these requirements, or related phase-in qualifications, subjects a thrift to regulatory action by the Office of Thrift Supervision.

More Funding for Affordable Housing. FIRREA also expanded funding for affordable housing. It requires each Federal Home Loan Bank to subsidize the interest rate on advances to member thrifts that offer long-term mortgages for affordable housing for people with low and moderate income who are either owner-occupants or renters.

the thrift industry could best deal with its problems by closing the 300 or so thrifts that were clearly no longer viable financial enterprises, by introducing stronger regulatory supervision, and by replenishing the insurance fund's reserves. Most of the failing thrifts could be dealt with or "resolved" by being sold to or merged with stronger, surviving institutions. If necessary, a thrift could be closed and liquidated (its depositors paid off and its assets sold), but such drastic steps would be rare.

To other observers, the crisis was more deeply seated: the thrift industry was moribund, a victim of overcapacity and lax regulation. In 1989, these observers viewed the job of the RTC as one of presiding over the consolidation and sharp contraction of the industry. Resolving failed thrifts meant shutting them down, paying off depositors, and selling off their assets (that is, liquidating them). If these steps were successful, some institutions might survive, but they would be a very small fraction of the industry.

Organizational Responsibilities for Cleaning Up the Thrift Industry

FIRREA created a complex bureaucratic structure of federal agencies to accomplish the act's various goals (see Appendix A for a description of these agencies). The act abolished one set of federal thrift regulatory agencies and replaced it with another. Table 2 shows the various federal agencies according to function both before and under FIRREA. Because some agencies and arrangements of the clean-up process are temporary, the table also shows the organization of agencies after the RTC stops resolving failed thrifts at the end of fiscal year 1993.

The functions performed by the Federal Home Loan Bank Board were split between the Office of Thrift Supervision, which is an agency of the Treasury Department created to

regulate and supervise thrifts, and the Federal Housing Finance Board, which is an independent executive branch agency established to administer the Federal Home Loan Bank System.²

FIRREA also changed the administration of the deposit insurance funds. The Federal Savings and Loan Insurance Corporation was replaced by the Savings Association Insurance Fund. The SAIF does not become fully operational until 1993, when the RTC is scheduled to complete its resolution function. The separate insurance funds for banks and thrifts were placed under the Federal Deposit Insurance Corporation. FIRREA also renamed the old fund for banks the Bank Insurance Fund.

The FSLIC Resolution Fund was created to administer and dispose of the assets and liabilities of thrift receiverships formed before 1989. The Resolution Trust Corporation assumed those responsibilities beginning in 1989. The fund will take over any remaining assets and liabilities from the RTC on January 1, 1997, and will administer the RTC's remaining receiverships. FIRREA also instructed the FDIC to liquidate the Federal Asset Disposition Agency, which was chartered by the Bank Board as a private entity to manage and dispose of some of the assets of failed thrifts.

Office of Thrift Supervision

The OTS is the primary federal regulator of nationally chartered thrifts and of state-chartered thrifts that are insured by the Savings Association Insurance Fund. It establishes capital requirements, which must be no

2. FIRREA also severed the ties of the Federal Home Loan Mortgage Corporation (Freddie Mac) from the Federal Home Loan Bank Board. The Emergency Home Finance Act of 1970 authorized the creation of Freddie Mac to provide a secondary market for conventional home mortgages. Before FIRREA, Freddie Mac was owned by the Federal Home Loan Bank System and its member thrift institutions and was governed by members of the Federal Home Loan Bank Board. See Congressional Budget Office, *Controlling the Risks of Government-Sponsored Enterprises* (April 1991).

Table 2.
Federal Institutions That Regulate and Finance Thrift Failures, Before and Since FIRREA

Function	Before FIRREA	Under FIRREA	Post-RTC ^a
Regulate Thrift Industry	Federal Home Loan Bank Board	Office of Thrift Supervision	Office of Thrift Supervision
Insure Deposits at Thrift Institutions	FSLIC	Savings Association Insurance Fund, under direction of FDIC	Savings Association Insurance Fund, under direction of FDIC
Resolve Failed Thrifts and Administer Receiverships	FSLIC, under direction of FHLBB; from 2/6/89 to 8/9/89, FDIC	Resolution Trust Corporation, under direction of Oversight Board ^b	Savings Association Insurance Fund, under direction of FDIC
Dispose of Assets from Failed Thrifts	Federal Asset Disposition Agency	FSLIC Resolution Fund and RTC	RTC until 1997; FSLIC Resolution Fund thereafter
Source of Funding	Financing Corporation (since 1987); FSLIC	REFCORP (off-budget); general fund appropriations; borrowing from FFB; FHLB contributions	SAIF premiums; general funds ^c
Regulate Federal Home Loan Banks	Federal Home Loan Bank Board	Federal Housing Finance Board	Federal Housing Finance Board

SOURCE: Congressional Budget Office.

NOTE: FIRREA = Financial Institutions Reform, Recovery, and Enforcement Act of 1989; FSLIC = Federal Savings and Loan Insurance Corporation; FDIC = Federal Deposit Insurance Corporation; REFCORP = Resolution Funding Corporation; FFB = Federal Financing Bank; FHLB = Federal Home Loan Banks.

- a. Post-RTC refers to the time after the Resolution Trust Corporation has stopped taking failed thrifts into conservatorships, currently scheduled for September 30, 1993. After this time and until December 31, 1996, the RTC continues to be responsible for resolving thrifts it controls in conservatorships and disposing of assets and liabilities it controls in receiverships.
- b. Restructured in 1991, it is now called the Thrift Depositor Protection Oversight Board.
- c. The Savings Association Insurance Fund is intended to be self-financing after an initial capitalization paid by the Treasury from general funds. Thereafter, general funds could be required if premiums cannot finance all required resolutions, but statutory limitations would apply.

less severe than those for national banks, and other operating guidelines and is responsible for supervisory actions that discipline non-compliant thrifts.³ For example, when an institution is not in compliance with minimum capital standards, it must submit a business plan that indicates how the thrift will restore its capitalization. Until the OTS approves an

acceptable plan, the thrift is subject to supervisory actions such as removal of officers and directors, suspension of dividends, and limitations on growth. Such disciplinary actions are designed to minimize further losses at the thrift.

The Office of Thrift Supervision determines when a thrift has failed and either places the thrift into an RTC-administered conservatorship or directly arranges an RTC-funded resolution without conservatorship. FIRREA

3. The OTS works with the state thrift regulatory authorities who have legal responsibility for closing state-chartered thrifts that the SAIF insures.

established eight grounds for placing a failed insured depository into conservatorship. Insolvency is the primary one; other important ones include operating in an unsafe and unsound manner and violating laws or orders to cease and desist. Because of potential litigation from shareholders and other interested parties that may contest any grounds for closure other than insolvency, the OTS has been reluctant to use its power to take over failed thrifts that are not book-value insolvent.⁴ Although the courts have upheld the OTS's decision to close failed institutions for reasons other than insolvency, the agency prefers to rely on insolvency as the grounds for closure.

Resolution Trust Corporation

The RTC is the primary agency charged with resolving the thrifts that the OTS has deemed to have failed. FIRREA charged the RTC with resolving failed thrift institutions that the FSLIC had insured and that were placed into RTC conservatorship or receivership between February 6, 1989, and August 9, 1992--now extended to September 30, 1993. The RTC was to resolve failed thrifts so as to maximize recovery of assets, minimize the impact of its activities on local markets, efficiently use its funds, minimize losses incurred in resolving cases, and maximize preservation of affordable housing.

The resolution process is not straightforward. The RTC can either sell all or part of an institution or liquidate the institution outright. Narrowly defined, resolution means only that a decision is made about how to deal with the institution and that funds are committed from the RTC. The RTC must still administer receiverships formed for every thrift

that it deals with. Receiverships are part of the asset (and liability) disposition process. Chapters 4 and 5 discuss the resolution process and the disposition of assets.

FIRREA made the Federal Deposit Insurance Corporation the exclusive manager of the RTC, with the FDIC's board of directors serving as the RTC's board. The chairman of the FDIC's board was also the chairman of the RTC and administered RTC operations. The RTC has roughly 7,000 employees, many of whom came from the now-abolished Federal Home Loan Bank Board or the FSLIC.

The oversight of the RTC was cumbersome under FIRREA. The board of directors of the Federal Deposit Insurance Corporation administered the RTC's operations, and the RTC Oversight Board (discussed below) set strategic policies. To streamline this arrangement, the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 (RTCRIA) made the RTC an independent agency within the executive branch. The RTC is now headed by a chief executive officer who is appointed by the President and confirmed by the Senate. This change, as well as the restructuring of the Oversight Board, removes the RTC from the FDIC's direct administration. Permanent employees of the RTC are, however, employees of the FDIC on assignment to the RTC. The Oversight Board still sets strategic policies.

Oversight Board

FIRREA created the RTC Oversight Board to develop a strategic plan for the RTC and direct its general policies. In extraordinary circumstances, the Oversight Board had the authority to remove the FDIC as exclusive manager of the RTC. Under FIRREA, the Oversight Board comprised the Secretary of the Treasury, who served as chairman; the Secretary of Housing and Urban Development (HUD); the chairman of the Board of Governors of the Federal Reserve System; and two people chosen by the President of the United States and confirmed by the Senate.

4. The Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) required the OTS as of December 19, 1992, to close thrifts within 90 days of their tangible capital's falling below 2 percent of their tangible assets. FDICIA, which made similar requirements for bank regulators, also required that supervisory actions be taken if thrifts fell below higher thresholds of tangible capitalization.

The structure of RTC oversight was widely criticized. In addition to having an Oversight Board, the RTC was directly administered by the FDIC's board of directors, and its chief executive officer and board chairman was the chairman of the FDIC. Many analysts felt that the RTC was unnecessarily hampered by having, in effect, two boards of directors.

As discussed above, the RTC Refinancing, Restructuring, and Improvement Act of 1991 changed the structure of RTC oversight. The RTC Oversight Board was renamed the Thrift Depositor Protection Oversight Board (which is still referred to as the Oversight Board), and its membership was expanded from five to seven. The Secretary of the Treasury is still the chairman of the Oversight Board, but the Secretary of HUD was removed. The director of the Office of Thrift Supervision and the chairman of the FDIC were added to the board, as was the newly created position of chief executive officer of the RTC.

On December 31, 1989, the Oversight Board issued its strategic plan for the Resolution Trust Corporation. Its mission statement, which reflected language in FIRREA, had three goals: maximize return and minimize loss, minimize the impact on local real estate and financial markets, and assure that housing remains available and affordable for people with low and moderate income. The plan defined objectives for resolving failed thrifts and disposing of assets, the RTC's two primary functions.

The plan established six objectives for case resolution: operating conservatorships conservatively; giving priority to resolving the "worst-case" thrifts (those that had high rates of losses, including both operating losses and loss of franchise value); selecting the least-cost resolution method on a case-by-case basis; developing an open and fair bidding process for selling institutions; establishing computer systems and recordkeeping for oversight and public information; and, to the extent practicable and efficient, using private-sector entities for the management and disposition of institutions under RTC control.

The four objectives for asset disposition were maximizing the net present value of recoveries using appropriate policies, procedures, or guidelines; placing assets under private control for management and disposition to the extent practicable and efficient; minimizing the impact of RTC transactions by expeditiously disposing of assets at fair market value while keeping market participants and other interested parties informed; and fully documenting activities relating to the management and disposition of assets.

Paying for the Cleanup

FIRREA established multiple sources of funding to pay for the cleanup. These sources are closely linked to the uses to which the funds will be put. The act authorized \$50 billion in funding for the initial phase of the cleanup, based on the Administration's estimates of the size of thrift losses (including an amount needed to finish paying for losses incurred by the FSLIC). The \$50 billion was thought to cover losses—that is, the difference between the amount the government would need to fulfill its guarantee for insured deposits and the net amount it would recover from disposing of assets.⁵ Such appropriations are referred to as loss money.

But resolving an institution typically requires more money than that needed just to close the gap between liabilities and assets. Some amount of funding, known as working capital, usually is required to finance the closure, pay off depositors, and hold the institu-

5 If a failed thrift is liquidated, the RTC pays off the insured depositors and shares in the proceeds of asset sales (net of the costs for administering liquidation) with uninsured depositors and other creditors. The difference between what it pays and what it ultimately recovers is the cost of resolution and is paid for with loss money. Pure liquidation is not always used. Instead, the RTC may pay someone else to be responsible for the insured deposits, or it may sell the institution to another depository. If it sells the whole institution, the RTC pays the acquirer an amount equal to the difference between the total liabilities the acquirer assumes (which may include uninsured liabilities) and the assets it purchased.

tion's assets until they can be disposed of. FIRREA allowed the RTC to borrow this working capital from the Treasury (specifically, the Federal Financing Bank) until it could repay those funds from the proceeds of asset sales.

The complicated funding arrangement for the RTC has led to some confusion. Some people erroneously assume that speeding up asset sales will reduce the RTC's appropriation requirements; they think that the proceeds from selling the assets of resolved thrifts could be used to finance the resolution of other thrifts. That is not the case. The RTC uses what it recovers from a thrift resolution and receivership only to recover the portion of the gross outlays--that is, the working capital--that financed the acquisition of those assets in the first place. The cash from recoveries merely repays the money the RTC borrowed for working capital. But if asset sales yield more than initially estimated, then estimated losses would necessarily be reduced, freeing up some resources to pay for other thrift resolutions. The RTC still would need additional working capital to pay for losses associated with subsequent resolutions, but its needs for appropriations of loss money would be lessened.

RTC Uses and Sources of Funds

As of December 31, 1992, the RTC reported that it had spent nearly \$85 billion on losses at thrift institutions. This amount represents what the RTC has recorded as the accrued charge for losses at thrifts it has resolved; it is based on the present-value estimates the RTC makes at resolution. This amount is lower than the \$86.8 billion appropriated by FIRREA and the two separate acts passed in 1991, which is recorded on a cash basis. Total RTC spending--including the losses, working capital, interest paid to the Federal Financing Bank, advances to conservatorships, and other disbursements--equaled \$203.6 billion, leaving the RTC with a cash balance of \$2.8 billion (see Table 3).

Table 3.
The Resolution Trust Corporation's Uses and Sources of Funds, Inception Through December 1992

Type of Funds	Amount (Billions of dollars)
Uses	
Resolutions	
Losses	84.5 ^a
Working capital	105.9
Subtotal	190.4
Other	
Interest paid to Federal Financing Bank	6.9
Advances to thrifts in conservatorship ^b	6.8
Other disbursements (Net) ^c	0.5
Subtotal	13.2
Net Cash Available	2.8
Total	206.4
Sources	
Government Authorizations	
Initial authorization under FIRREA	50.1 ^d
Funds from RTC Funding Act of 1991	30.0
Fundings from RTCRRIA ^e	6.7
Funds borrowed from the Federal Financing Bank	37.2
Subtotal	124.0
Recoveries from Receiverships	82.4
Total	206.4

SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

- The \$84.459 billion the RTC reported as the amount of loss money used to date is reported on an accrual basis. It does not represent the amount of cash spent for losses, which is lower.
- Conservatorship balances are net principal balances outstanding.
- Includes expenses paid on behalf of conservatorships and other corporate disbursements, minus interest payments and expense reimbursements received from conservatorships and other sources.
- The \$50.1 billion reflects a Treasury appropriation of \$18.9 billion, assessments on the retained earnings of the Federal Home Loan Banks of \$1.2 billion, and funds borrowed by the Resolution Funding Corporation totaling \$30.1 billion.
- The RTC Refinancing, Restructuring, and Improvement Act of 1991 (RTCRRIA) allowed the RTC to obligate as much as \$25 billion in funds for new resolutions through March 31, 1991. The RTC later returned \$18.3 billion to the Treasury that had not been obligated by the March 31 deadline.

FIRREA's authorization of \$50 billion was consistent with the view, discussed in Chapter 2, that the crisis was temporary and that most institutions in the industry would survive. The first \$20 billion of the \$50 billion authorization was raised in September 1989: \$1.2 billion came from assessments on the retained earnings of the Federal Home Loan Banks, and \$18.8 billion from the Treasury Department. The remaining \$30 billion came from funds borrowed by the Resolution Funding Corporation (REFCORP) on behalf of the RTC. FIRREA created REFCORP specifically to finance the thrift bailout off-budget.⁶

Although the RTC can take over as many thrifts as required and operate them in conservatorship, it can resolve thrifts only if the estimated cost of resolution does not exceed the remaining loss money authorized by the Congress. This constraint has slowed RTC resolutions as appropriations have run out.

Realizing in 1991 that the RTC lacked sufficient funds to pay for all of the institutions that would need to be resolved, the Congress appropriated additional funds. In March 1991, the RTC Funding Act provided \$30 billion, and in December 1991 RTCRIA provided an amount not to exceed \$25 billion for resolutions through March 1992. The RTC had committed only \$6.7 billion of the latter appropriation by the end of March, and therefore the authority to use \$18.3 billion expired. Since March 1992, the RTC has had no additional appropriations and, as shown in Table 3, has used most of its available loss money.⁷

Although losses are covered by appropriations to the RTC, much of the funding for the portion of gross outlays that is expected to be recovered--working capital--must be borrowed. FIRREA provided authority to borrow for working capital, subject to some limitations. Interest on such borrowings is considered part of the loss money appropriated to the RTC.

The RTC is somewhat constrained in its ability to borrow working capital. Currently, the RTC cannot issue obligations for working capital in excess of its cash balance plus 85 percent of the fair market value of its other assets. Despite the depletion of its appropriations, the RTC has avoided having to borrow up to the limit of its working capital from the Federal Financing Bank. The RTC has been able to manage its cash position well enough so that the borrowing limits on working capital have not been the cause of delay in the resolution process. Moreover, the RTC, or the FDIC on behalf of the RTC, is authorized to borrow up to \$5 billion directly from the Treasury. To date, it has not used this authority.

Through December 1992, the RTC had outstanding borrowing from the Federal Financing Bank of about \$37 billion. This borrowing, plus about \$82 billion available from recoveries from receiverships, provided sufficient financing for working capital.

Budgetary Implications of RTC Spending

The financing of the thrift cleanup has budgetary consequences, but the budgetary treatment is almost as confusing as the funding arrangement. The federal budget is reported on a cash basis, and this practice has distorted the timing of the recognition of expenses asso-

6. According to FIRREA, the Federal Home Loan Banks were to be assessed \$1.375 billion against their retained earnings during 1990 and 1991. These payments were to decrease the principal of debt issued by REFCORP. Interest payments on REFCORP debt were to be paid in part by assessments, not to exceed \$300 million annually, on the Federal Home Loan Banks. Insofar as the Treasury Department paid the remaining balance, the interest payments on REFCORP debt made by the Federal Home Loan Banks were considered to be on-budget and subject to the general constraints on the federal deficit.

7. The RTC has operated with a positive cash balance--\$4.5 billion as of September 30, 1992--of which it could use only \$2.3 billion for loss money. This cushion has permitted the RTC to resolve a few institutions since March 31, 1992, which was the cutoff for the December 1991 appropriation.

ciated with the thrift cleanup.⁸ If the federal budget were instead on an accrual basis, then losses associated with thrift failures would be recorded as they happened. Being on a cash basis, however, the budget reflects outlays only when cash is spent. The budget therefore reflects the cost of the thrift cleanup some years after the costs have been incurred.

This characteristic of the federal budget has led to the misconception that funding the thrift cleanup is discretionary. As discussed below, however, only the timing of the funding is discretionary. If appropriations for the cleanup are delayed--and the bill for costs incurred in prior years goes unpaid--the ultimate cost of the cleanup increases.

RTC Appropriations Are Not Discretionary. The guarantee the federal government provides through deposit insurance commits it to compensating depositors at failed thrifts up to the coverage limit of \$100,000 per account. Because of this guarantee, the government expense was implicitly incurred at the time thrifts failed in an economic sense. The RTC's appropriations to resolve institutions merely recognize the expenses already incurred.

In practice, the resolution of many failed thrifts also results in the full compensation of their uninsured creditors. The government spending associated with this compensation does not make it discretionary, because the RTC is required to use the resolution method that involves the least cost to the government even if that method fully compensates uninsured parties.

The Timing of RTC Appropriations Is Discretionary. Unlike the funding for the clean-

up, the timing of when funds are made available to the RTC is discretionary. The consequence of not funding the cleanup in a timely fashion, however, is that the cost is driven up.

Timing of Appropriations and Consequences of Delay

The RTC can resolve institutions only if it has the authority to commit loss money for resolutions. It typically needs these funds to be available three months before resolution. The RTC has depleted its appropriation three times during its brief history. The first two times the Congress appropriated additional funds, but only after a delay. Because these appropriations came when the RTC was close to depleting its spending authority, the process of resolving thrifts was interrupted. The RTC has been given no further appropriation for loss money since passage of RTCRRIA in December 1991.

Delays in appropriations are estimated to have slowed the resolution process by about six to seven months and, by the RTC's estimates, to have cost between \$1 billion and \$2 billion. Administrative overhead costs for the RTC accumulate at the rate of about several hundred million dollars per year. Delay in the resolution process increases the carrying cost of maintaining assets in thrifts that have been taken over but not yet resolved. Thrifts in conservatorship continue to incur net operating expenses because their assets yield less than their liabilities cost.

Allowing ailing institutions to stay in business can also drive up the ultimate cost of resolution. Troubled thrifts that have not been taken over can still make bad investment decisions and deteriorate in value; they can cause healthy thrifts to incur losses through competition. The OTS has improved its supervision of troubled thrifts, but it cannot fully contain losses in insolvent thrifts that continue to operate, even those that are in conservatorship.

8. See the following Congressional Budget Office publications: *Budgetary Treatment of Deposit Insurance: A Framework for Reform* (May 1991); *The Economic Effects of the Savings & Loan Crisis* (January 1992); and *The Economic and Budget Outlook: An Update* (August 1991).

Resolving Failed Thrifts

Government resolution of failed thrift institutions is a complicated process. Through federal deposit insurance, the government guarantees that deposits of \$100,000 or less per account will be paid in full. If a thrift fails, the government either pays depositors or transfers their accounts to the institution that has acquired the failed thrift. It then tries to recover as much of the money it pays out as possible by selling the thrift's assets. The government, however, must share the proceeds of the sale of those assets with the institution's uninsured creditors.¹ The cost of resolution is the difference between what the government pays out to depositors and other creditors and what it receives from net proceeds of the asset sale, plus administrative expenses. In most cases, at least some of the assets are sold long after depositors' claims are settled. Thus, for purposes of discussion and analysis, the disposal of remaining assets is treated separately, in Chapter 5.

As discussed in Chapter 3, the Resolution Trust Corporation is the primary agency responsible for resolving failed thrifts. The manner in which these resolutions are orchestrated has a direct bearing on the final cost of the thrift crisis. Through its operations, the RTC may be able to lower the cost of the

cleanup by realizing higher values for the thrifts that it is resolving. Or it may contribute to raising the cost of the cleanup if it operates inefficiently or pursues policies that diminish the values that it recovers through resolution.

The RTC's methods for resolving failed thrifts are primarily a continuation of practices developed by the Federal Savings and Loan Insurance Corporation (see Appendix B). One of the important legacies of the FSLIC's resolution practices is a preference for resolving an institution by selling it rather than liquidating it. This chapter concludes, however, that the RTC's apparent preference for institutional sales may no longer be warranted by market conditions. The RTC has encountered difficulties in arranging such sales and has had to resort to a higher proportion of liquidations than did the FSLIC. Options to change the RTC's resolution practices are examined in Chapter 6.

The Road to Resolution

When a thrift fails, it generally goes through four stages before it is fully resolved--economic failure, government conservatorship, liquidation or sale, and termination of receivership. The stages of resolution described below are somewhat oversimplified but nonetheless provide a useful overview of the process by which government regulators resolve failed thrifts. Not all thrifts formally pass through each stage or do so in exactly the manner de-

1. The Resolution Trust Corporation stands as an equal claimant with nonsubordinated creditors when the proceeds of a failed-thrift receivership are distributed. The RTC stands ahead of subordinated creditors and shareholders, but behind creditors whose loans to the thrift were secured by an asset of the thrift.

scribed. But in all cases there are fairly well-identified actions in which failure is recognized, insured deposits are paid, and legal claims are settled. In the following discussion, how a thrift slides from financial health to economic failure is not as important as what happens to the thrift after it has failed.

Economic Failure

A thrift fails when it becomes irrevocably insolvent. Economists usually interpret insolvency to mean that the market value of a thrift's liabilities exceeds the market value of its assets. The thrift, however, may appear to be solvent on the basis of the reported book value of its assets and may be able to continue operating as long as its creditors do not insist on immediate payment and the government does not close it. A thrift that has sufficient cash resources to cover depositors' withdrawals can continue to try to attract more deposits and further invest its funds. But that condition is usually temporary.

To be viewed as a viable enterprise, a thrift must be expected to remain profitable. The fact that a thrift can continue to operate while being market-value insolvent means that it has the potential to recover. Economic conditions may improve and interest rates may drop, increasing the value of some of the thrift's assets. The Office of Thrift Supervision may decline to close the thrift for these reasons and may prefer to take supervisory actions, such as requiring a business plan for recapitalization or issuing cease-and-desist orders to stop unwarranted practices. These actions can limit the potential losses of the thrift and possibly help it recover.

Most thrifts that are market-value insolvent, however, find it very difficult to recover. If creditors perceive that the thrift is in trouble, they will want higher interest rates for funds, further hurting its ability to recover. At the same time, owners and managers of the market-value insolvent thrift have an incentive to make risky investments with those funds as long as regulators fail to intervene.

Although these gambles may pay off, they are riskier than prudent financial institutions typically undertake, and the thrift probably will make itself worse off even if it refrains from grossly negligent or fraudulent behavior.

Government Takeover: Conservatorship

When an economically failed thrift is legally declared to have failed, regulators take over its operations and place it in a conservatorship. Either the OTS or the state regulatory authority is responsible for declaring that a thrift is insolvent or is operating in violation of one or more of the conditions that require closure.² Some directors, officers, managers, and other employees may be removed, but the regulator typically permits the thrift to continue to conduct business--making collections and honoring withdrawals. As long as its value is not threatened, the thrift may be permitted in a limited fashion to accept new deposits and borrow and invest funds. The administrator of the conservatorship, usually the RTC, is responsible for preserving as much value in the thrift as possible.

During the conservatorship stage of the resolution process, the RTC conducts a thorough audit of the thrift to certify that all reported assets and liabilities exist and that all legal paperwork associated with the thrift's accounts and other holdings or borrowings is in proper order. Known as a due-diligence audit, this process is a very labor-intensive and time-consuming task, complicated by the fact that many failed thrifts have kept poor records. For example, some thrifts have little or no documentation--not even the application form--for some mortgages that they hold.

2. As of December 19, 1992, the OTS is required to close within 90 days any thrift whose tangible capital falls below 2 percent of its tangible assets. This requirement was a central provision of the Federal Deposit Insurance Corporation Improvement Act, which was signed into law in December 1991. FDICIA also required that bank and thrift regulators take supervisory actions against thrifts whose tangible capitalization ratio was between 6 percent and the 2 percent cutoff.

Due-diligence audits may involve a market-value appraisal of assets. In many cases, the RTC relies on experience with recovery rates for various categories of assets that they had disposed of previously or that they have market information on. Estimates of the value of a failed thrift's assets, therefore, are not necessarily based on the particular assets held by that thrift but rather on the types of assets it held, and so are subject to considerable uncertainty.

Resolution by Liquidation or Sale

After a due-diligence audit has been performed, the RTC estimates the cost of resolving the failed thrift either by liquidating it or by selling the corporate entity with some or all of its assets and liabilities. The RTC will resolve the institution by selling it if a single buyer can be found who will acquire some or all of the assets and liabilities at a cost to the regulator that is lower than the estimated cost to liquidate the thrift. If, after some time, a buyer has not been found, the RTC liquidates the institution and places its assets in a receivership to be sold piecemeal.

If the thrift is liquidated, the RTC pays off insured depositors, and it and other creditors share in the proceeds of the disposal of assets. If the thrift institution is sold, then some or all of its deposits and other liabilities are transferred to the acquiring thrift along with some or all of its assets. It is usually at this point--when a decision is made to sell or liquidate the thrift--that the thrift is said to have been resolved.

The terms "resolve" and "resolution" are not defined in law. Full resolution refers to the total return of the assets and claims in the institution to the private sector--or the act of terminating a receivership--but the RTC considers an institution resolved much sooner in the process.³ According to the RTC, a thrift has been resolved when the insurance aspect of each resolution has been completed--that is,

when the government has satisfied the claims of insured depositors by either paying the depositors the full amount of their insured deposits or transferring the deposits to a healthy financial institution. Thus, most RTC resolutions leave the RTC with assets to dispose of and claims to settle--that is, much of the full resolution is left to be completed later.

Receivership

At the time of RTC resolution, the old thrift ceases to operate, but its legal entity is transferred to a receivership created to sell or otherwise dispose of all remaining assets. In a receivership, the RTC reconciles all of the thrift's legal and financial claims and completes the resolution process. The RTC deducts from the gross proceeds the administrative costs of the receivership and any awarded legal claims. The remaining proceeds are then used to pay off claims in the following order of priority: creditors whose claims were secured by assets of the failed thrift; the financial claims of general creditors, including those of the RTC; and the claims of subordinated creditors, such as those representing subordinated debt.⁴ Finally, stockholders share the remaining proceeds, with preferred shareholders having priority. The RTC, however, does not expect stockholders to recover anything from the receiverships.

Completing the receiverships can take a long time, historically averaging about seven years. A receivership is not finished until the courts order its termination.

3. Letter to Congressman Bruce F. Vento from Craig A. Simmons, Director, Financial Institutions and Market Issues, General Accounting Office, February 4, 1991.

4. Rather than give these secured claimants the collateral that secured the claim, the RTC pays them the face value of the claim. Although the RTC arguably could either reduce its costs if the collateral is worth less than the claim or reduce the amount of assets it must dispose of, the RTC believes that it is simpler and less legally entangling to pay off the secured claimants.

Methods of Resolving Failed Thrifts

Once the Office of Thrift Supervision has determined that a thrift has failed, the thrift enters the RTC caseload. The RTC must determine how to resolve the thrift—that is, how to pay the depositors and other creditors and also to obtain the highest value from the thrift's assets and its intangible network of relationships with customers and suppliers (its franchise value) in order to offset the cost of those payments. In addition, the OTS has devised some methods of its own to help resolve thrifts even before they fail.

RTC Methods of Resolution

Two general methods exist for resolving a failed depository institution: the insurer may liquidate the institution or sell it to another. The specific methods the RTC employs in resolving failed thrifts vary in complexity and cost. A pure liquidation of a thrift is relatively straightforward: depositors are paid their insured amounts, and assets are sold (over time) to pay for as much of those costs as possible; the difference between costs and net recoveries to the RTC is the cost of resolution.⁵ An institutional sale, or a merger, is a way of both selling some of the thrift's assets and realizing a somewhat higher value for the thrift by transferring at least part of it to another institution at the same time that its deposits and liabilities are being resolved. This method preserves some of the thrift's franchise value. The benefits of mergers are the higher values that can be obtained; the cost, however, is that many uninsured depositors and other creditors are compensated much more than they would be under a liquidation because some un-

insured liabilities are transferred at full value to the acquiring institution in the merger.

Liquidation. This is the most drastic resolution method. It immediately closes the thrift and settles its depositors' accounts. There are two types of liquidation: a pure liquidation, also known as an insured deposit payout, and an insured deposit transfer, or IDT. Both types generally imply that uninsured depositors are not fully compensated, although some uninsured deposits may be sold under the IDT, thereby fully protecting the value of those deposits. As explained below, selling those deposits reduces the RTC's costs.

An *insured deposit payout* requires that the RTC pay off insured depositors. In its role of receiver, the RTC disposes of the assets and shares the proceeds of the sold assets with uninsured, unsecured creditors. This disposition causes the RTC to lose all of the franchise value that the thrift may have had. In addition, the RTC has to spend a considerable amount of cash up front: disposing of the assets can take a long time, yet depositors need to be paid right away.

In contrast, an *insured deposit transfer* liquidates the thrift but preserves the franchise value associated with deposits. IDTs are a hybrid type of resolution, involving the auctioning of liabilities (generally only the insured deposits); some assets, such as branch offices, may be included. The RTC auctions these liabilities to an acquirer who is willing to secure existing customer (depositor) relationships. The difference between the value of these deposits and what the RTC pays the acquirer is called a premium.

To those unfamiliar with thrifts or with banking in general, it can seem odd that an acquirer may wish to assume someone else's liabilities and pay a premium to do so. The use here of the term premium should not be confused with the insurance premiums thrifts pay for deposit insurance. Paying a premium in this case means that the acquirer of the deposits is willing to accept a payout from the RTC for those deposits that is less than the

5. Recoveries to the RTC are net of distributions made to uninsured creditors who, unless they are subordinated by the nature of their claim, share in the proceeds of the receivership.

deposits' face value.⁶ Acquirers do this for two reasons. First, these deposits may offer a lower interest rate than other sources of borrowed money and thus represent a cheap source of borrowing. Second, by acquiring deposits, the acquirer also obtains the business associated with the depositors. Because depositors also borrow from the thrift and pay for other financial services it offers, purchasing deposits is regarded as purchasing a customer base--in essence, an intangible asset. Of course, some customers may withdraw their funds or close their accounts after the acquisition, but acquirers have found that they retain enough of the old thrift's customers' accounts to make the acquisition worthwhile.

The most desirable deposits are called core deposits. These deposits are in accounts that are typically small (less than \$80,000) and not very sensitive to price competition. Customers with core deposits are influenced in their selection of a depository more by its location and convenience than by the rates it offers. These deposits are inexpensive (that is, they offer a lower interest rate) relative to large deposit accounts or the acquirer's other borrowings.

Institutional Sale. In a merger, or institutional sale, the RTC resolves a failed thrift by selling it to another institution. Most mergers are accomplished through a technique known as purchase and assumption (P&A).⁷ Under a P&A, an acquiring institution (determined through auction) purchases the assets of the troubled institution and assumes its liabilities. The RTC pays the acquirer of the failed thrift for the difference in value between assets purchased and liabilities assumed. This method reduces the cost to the RTC because it

captures the positive franchise value of the troubled thrift.

Auctioning an institution, however, even in part, can be time-consuming. Delays in finding P&A acquirers allow the failed thrift--even though it is operating in RTC conservatorship--to continue operating and thus incur even greater losses. Some of the losses incurred by conservatorships are unavoidable. For example, the RTC more closely scrutinizes the books of conservatorships, and it forces recognition of past losses that the failed thrift's books did not accurately show. Other losses are potentially avoidable. The RTC purportedly does not permit the conservatorship to make new imprudent investments, but it is unclear whether the RTC conservators maintain the value of assets in the conservatorship's portfolio as well as if these assets were privately owned. Other losses can occur if the conservatorship is paying more for some of its liabilities than it would if the RTC used other funding alternatives. For example, rather than use working capital available from the Federal Financing Bank, the RTC encouraged some conservatorships to use more expensive brokered deposits.

As will be discussed later in this chapter, the RTC used another potentially costly strategy to facilitate P&As. The RTC supposedly conducts a full due-diligence audit of the thrift's books before putting the institution on the auctioning block. Such an audit should include a full appraisal of the value of the failed thrift's assets. But this is a time-consuming and expensive procedure that can delay the merger process. In order to cut short the time needed to prepare the institution for sale, the RTC permitted many acquirers to buy the thrift and return any or all of the assets at a later date--usually 6 to 18 months--at full book value. One could argue that this arrangement, known as a put option, was not costly to the RTC: although the initial estimate of the cost would be revised, reflecting the fact that returned assets were worth less than the amount in the P&A resolution deal, the RTC would not have realized more for these assets than they were truly worth. However, the

6. The Resolution Trust Corporation reported in April 1990 that it captured a premium of 0.83 percent on core deposits in 35 resolutions of insured deposit transfers. Data on IDTs conducted by the Federal Savings and Loan Insurance Corporation for the 1984-1988 period show that the FSLIC captured a premium of between zero percent and 30.17 percent.

7. Some of the mergers arranged by the Federal Home Loan Bank Board had no explicit cost to the FSLIC. These mergers were known as supervisory mergers.

acquirer of the institution has little incentive to maintain assets that it might return to the RTC. Thus, the offering of put options to facilitate P&As can potentially be more costly than if the RTC had merely retained these "puttable" assets in the first place.

The P&A method of mergers has many variations. The "whole bank" variation involves the purchase of all assets and the assumption of all liabilities. The "clean bank" variation involves the purchase of only supposedly good assets and the assumption of all liabilities. Numerous other variations are possible.

OTS Methods of Resolution

The Office of Thrift Supervision has introduced one resolution program and proposed another to improve the efficiency of the resolution process by undertaking so-called early resolutions. The Accelerated Resolution Program (ARP) permits a troubled thrift to be resolved voluntarily by the OTS without being transferred to the RTC. These resolutions are targeted toward thrifts that are undercapitalized but not book-value insolvent.⁸ Under this program, the OTS sells a failed thrift with financial assistance provided by the RTC. Under the proposed Early Resolution/Assisted Merger program, the OTS would arrange a supervisory merger of a troubled thrift with-

out federal financial assistance (see Chapter 6 for details of this proposed program).

First used with resolutions in January 1991, the ARP permits existing management to continue to operate the troubled institution until it is sold, but shareholders of the institution do not benefit from the sale. Both the OTS and the RTC can market the institution while it is still in the private sector and not under RTC control. The RTC, however, must provide the federal funds needed to complete the sale. Closely supervised by the OTS, the institution targeted for an ARP resolution is highly restricted in its investment decisions and presumably would not increase RTC losses by making risky investments or by making payments to shareholders, managers, or directors. The OTS had conducted 26 ARP resolutions through December 1992.

Assessing the Efficiency of RTC Resolutions

Since its inception, the Resolution Trust Corporation has resolved 653 thrifts (through December 1992) at an estimated cost of about \$85 billion on a present-value basis. The success of the RTC in dealing with these resolutions is difficult to assess. The data suggest that the RTC has encountered difficulties. But many of the problems it faces are imposed by market and political conditions and thus cannot be ascribed to the efficiency or effectiveness of the RTC operation itself. The high costs of resolution and the inability of the RTC to arrange the sale (purchase and assumption) of whole institutions may be related more to the quality of the thrifts being resolved than to RTC resolution strategies; delays in funding caused by the political process also have contributed to higher costs. Some of these problems, however, may be self-imposed. For example, the demonstrated preference for offering a thrift for sale as an institution and using the liquidation method only as a last resort may increase costs.

8. The OTS has transferred to the RTC thrifts that were book-value solvent at the time they were closed. This transfer requires using other grounds for closure, such as operating in an unsafe and unsound manner or suffering a substantial dissipation of assets, but the closing of thrifts that are book-value insolvent could be challenged in the courts by owners, managers, and other interested parties. The Federal Deposit Insurance Corporation Improvement Act of 1991 provided that federal regulators of depositories must take action against critically undercapitalized institutions. The act gave regulators strong ammunition for taking supervisory and closure actions against institutions that were solvent but undercapitalized. The provisions in FDICIA are referred to as "early resolution" provisions because they require action before book-value insolvency. Because many undercapitalized institutions are market-value insolvent, the now-mandatory actions against them are not truly early. Rather, such actions may be considered to be taken earlier than they would have been in practice otherwise.

Status of the Resolution Process

The RTC got off to a slow start, resolving only 37 thrifts in 1989. Since then, and until April 1992, the RTC has accelerated its pace, resolving about 200 to 300 thrifts per year. By the end of December 1992, the RTC had resolved 653 failed thrifts and still had 81 conservatorships. The 653 resolutions required commitments of \$85 billion, and the RTC again faced a depletion of resources for resolving failed thrifts.

Both the pace of resolution and the commitment of funds to losses from the resolved thrifts have been highly erratic and have delayed the completion of the cleanup (see Figure 4). Limits on the RTC's funding largely account for the erratic pace. The RTC required additional funding beyond the initial \$50 billion by early 1991; depletion of a second appropriation again slowed progress in the fall. The third appropriation, in late 1991, financed resolutions through March 1992, but the RTC needs more funding to complete the job.

One consequence of appropriating additional funds only after it is readily apparent that the RTC has exhausted its resources is that the resolution process has repeatedly been delayed. The sales of failed thrifts or their assets must be negotiated with some lead time. If the RTC does not have funds available for these sales, it cannot negotiate in good faith or act quickly on pending cases.

In contrast, the number of conservatorships the RTC operated at the end of any quarter has, until the second quarter of 1991, stayed roughly at about 200 cases (see Figure 4). Most outside observers, however, think that the number of thrifts that should be in conservatorship is higher than the number that actually are.⁹ Some analysts have argued that the relatively stable number of conserva-

torships operated by the RTC reflects management of the caseload by the agencies involved in the cleanup--that is, a purposeful control over the number of thrifts entering the RTC's caseload so as not to overburden it. During the start-up phase of the RTC, such coordination--between the OTS, which decides which and when institutions will be placed into conservatorship, and the RTC, which manages them--probably helped the fledgling agency to allocate its resources more efficiently. Continued management of the caseload, however, may increase resolution costs because it allows insolvent institutions to remain in private hands longer than necessary. As was explained in Chapter 2, delay in resolving thrifts is costly.

Comparing the RTC with the FSLIC

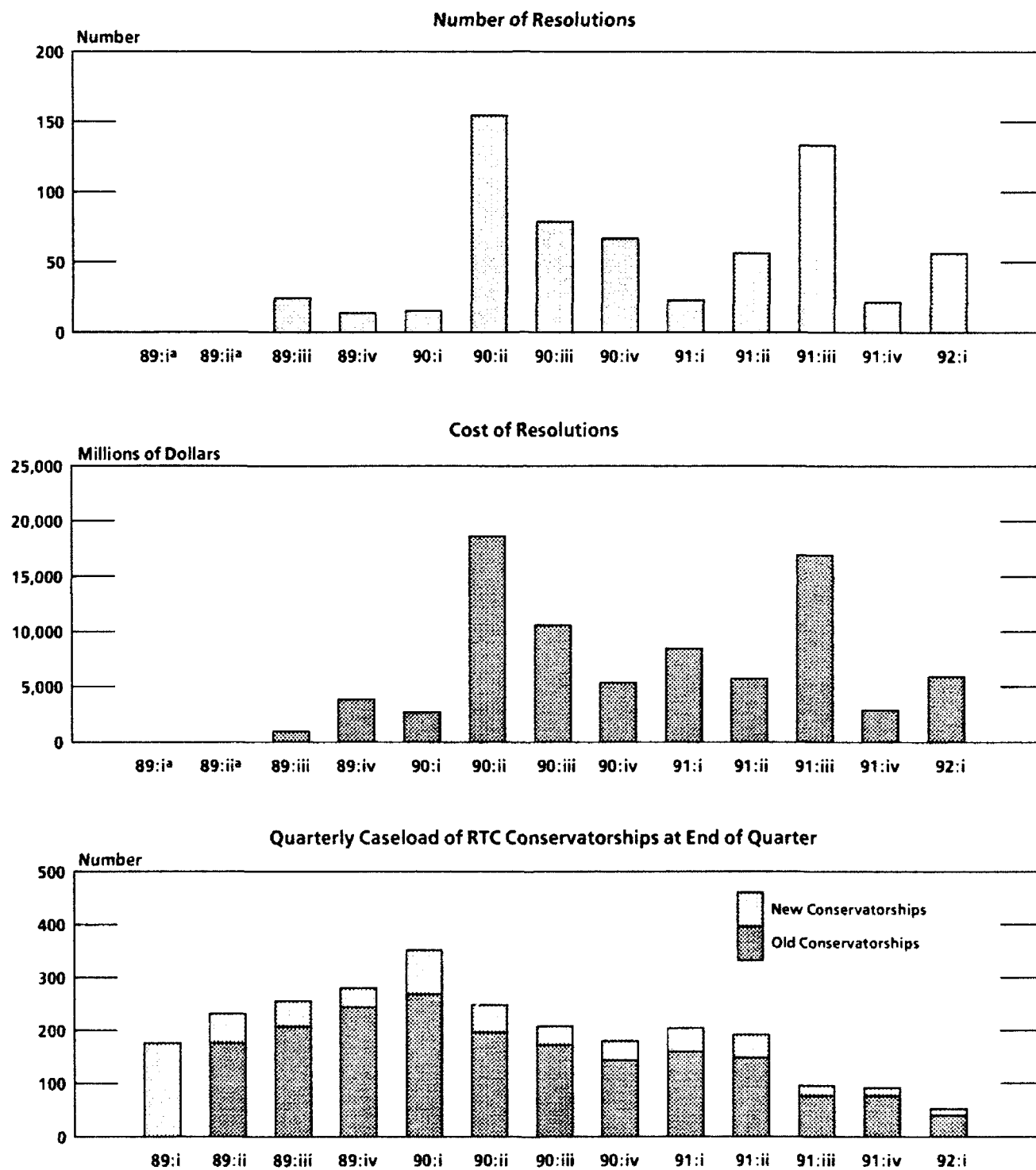
Because the RTC uses the same basic approach and techniques--purchase and assumptions, insured deposit transfers, and liquidation payouts--in resolving thrifts as its predecessor, the Federal Savings and Loan Insurance Corporation, it is useful to make some comparisons with the FSLIC's record. As discussed in Appendix B, one must be careful in drawing firm conclusions from the comparison because of differences in market conditions and other factors. The comparison, however, illustrates the scope of the RTC's task and helps to identify which problems may prove tractable.

The RTC has performed proportionately fewer P&As than did the FSLIC and has realized smaller savings (see Table 4).¹⁰ Because a P&A recoups some of an institution's franchise value, the RTC prefers it to a liquidation. About two-thirds of RTC resolutions have been P&As, compared with 84 percent of FSLIC resolutions.

9. See, for example, Robert E. Litan, "Getting Out of the Thrift Crisis, Now!" *The Brookings Review*, vol. 9, no. 1 (Winter 1990/1991).

10. Because the FSLIC had a shortage of cash resources, it may have given undue preference to resolving failed thrifts through institutional sales rather than liquidations. In these institutional sales, the FSLIC offered noncash incentives to many potential acquirers.

Figure 4.
Number and Cost of Resolutions by the Resolution Trust Corporation,
and Its Caseload of Conservatorships, First Quarter 1989 Through First Quarter 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

a. No resolutions during this quarter.

Table 4.
Resolutions by the Federal Savings and Loan Insurance Corporation
and the Resolution Trust Corporation

Type of Resolution	Thriffs Resolved		Cost of Resolution	
	Number	Percentage of Total	Millions of Dollars	Percentage of Total
FSLIC Resolutions, 1980-1988				
Liquidation	77	16	6,340 ^a	15
Purchase and assumption	412	84	35,995 ^a	85
Total	489	100	42,335 ^a	100
RTC Resolutions, 1989				
Through December 1992				
Liquidation ^b	246	38	23,319	27
Purchase and assumption	407	62	61,938	73
Total	653	100	85,257	100

SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board, the Office of Thrift Supervision, and the Resolution Trust Corporation.

a. Costs reported are revised as of April 1989 and do not reflect subsequent revisions made by the General Accounting Office.

b. Reflects resolution of 158 failed thrifts through insured deposit transfers and 88 through payouts.

For a majority of thrift resolutions, therefore, the RTC is still able to achieve some savings by selling institutions. The amount of savings estimated by the RTC for doing P&As rather than liquidation payouts, however, is lower than that reported by the FSLIC. Based on RTC cost estimates made at the time of resolution, the 407 P&A resolutions completed through the end of 1992 saved slightly more than \$3 billion because these institutions were sold (through a P&A) rather than liquidated (through a payout). The savings of \$3 billion represented a 5.1 percent savings for resolving these institutions using a P&A rather than a liquidation payout. Savings using an IDT were much lower, but the RTC estimates that its 158 IDTs have saved about \$144 million, or 0.9 percent, compared with resolving those thrifts through a liquidation payout.¹¹ By not using a liquidation payout on these 565 resolutions, therefore, the RTC estimates that it saved about \$3.2 billion, or 4.2 percent, of the

estimated cost of liquidating them with payouts. These aggregate savings, however, are lower than the 20 percent savings that the FSLIC estimated for the 205 resolutions it performed in 1988.¹²

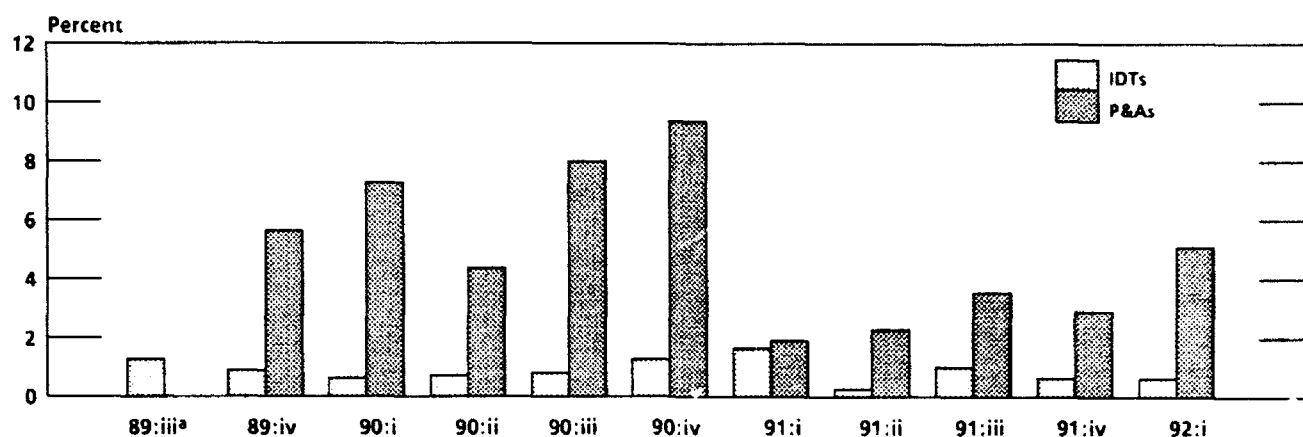
Evidence of Declining Franchise Value

There are several reasons why the RTC may be performing fewer P&As and saving less

11. Although an IDT is classified as a liquidation technique, it allows the RTC to capture some franchise value through the transfer of core deposits.

12. In 1988, the Federal Home Loan Bank Board and the FSLIC resolved 205 failed thrifts at an estimated present-value cost of about \$32 billion. By law, the FSLIC was required to provide an initial estimate of what it would have cost to liquidate those thrifts. This amount was reported to be about \$40 billion on a present-value basis. By resolving 179 of the thrifts through P&As, therefore, the FSLIC saved about \$8 billion, or 20 percent of the costs. The FSLIC's actual cost savings, however, may be far lower than reported. For example, the 179 P&As involved the transfer of \$5.5 billion of tax benefits to either acquirers or the FSLIC. As discussed in Appendix B, these tax benefits lowered costs for the FSLIC but not the Treasury. If the cost savings of the 179 P&As are lowered by the amount of the tax benefits, then the estimated cost savings of P&As over liquidation are only about 6 percent.

Figure 5.
Percentage of Liquidation Cost the Resolution Trust Corporation Saved
Using IDTs and P&As, Inception Through First Quarter 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

NOTES: In May 1991, the RTC revised upward its cost estimates of all resolutions. Although the cost of resolution increased 17 percent on average, the RTC's analysis suggests that the liquidation cost of those same resolutions increased more. Thus, the pre-1991 data may understate the true savings from using resolution methods other than a liquidation payout.

IDTs = insured deposit transfers; P&As = purchase and assumptions.

a. No P&As during this quarter.

than the FSLIC in the resolution process, and some of them are associated with declining franchise value. With the heightening of the thrift crisis and the tighter regulations the Financial Institutions Reform, Recovery, and Enforcement Act imposed on thrifts in 1989, the value of the thrift charter has declined considerably.¹³ In addition, real estate markets have been severely depressed, and the economy entered a recession in late 1990. For reasons of their own, potential buyers--mostly banks and other thrifts--may be less willing or able to acquire thrifts. There are fewer healthy thrifts left to acquire failed ones, and other potential purchasers--commercial banks--have been suffering from difficult economic conditions and have been failing at record rates since the mid-1980s.

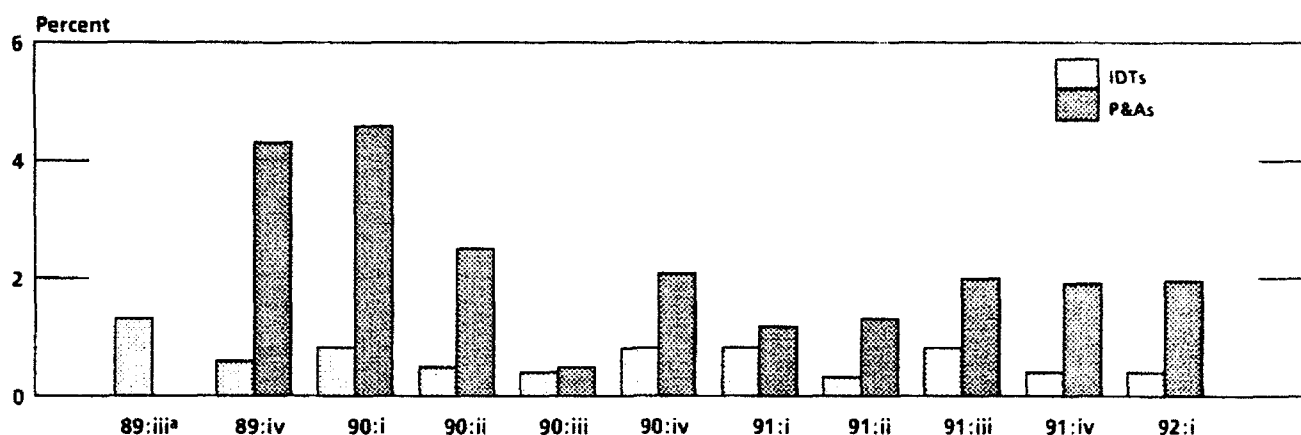
Charter Value and Other Intangible Franchise Values. Franchise value comes from a number of sources, including the thrift charter itself, having a specific network of branches, name recognition and market presence, and depositors' loyalty. When the RTC tries to sell a failed thrift or arrange its merger, it tries to recoup some, if not all, of these intangible values. Purchase and assumptions capture the value of the thrift charter, its network of supplier and customer relations, and its name; insured deposit transfers capture the value of core deposits--the accounts of loyal customers.

The amounts that institutional acquirers are willing to pay for purchase and assumptions and insured deposit transfers declined after 1990, as shown in Figure 5. For the 179 P&As conducted through December 1990, the RTC claims it was able to save, on average, 6 percent of the projected cost of a liquidation, or about \$1.6 billion.¹⁴ (During the same period,

13. In December 1989, some private analysts projected that only a handful of then-operating thrifts could successfully continue their operations. Higher capital requirements, higher insurance premiums, greater restrictions on activities, and a stiffer qualified thrift lender test reduced the value of the thrift charter. See, for example, Mark Wohar, "The Value of the Thrift Charter," *Office of Thrift Supervision Journal* (December 1989).

14. This calculation is subject to some error because savings are based on the difference between the projected cost of a liquidation and the P&A arranged.

Figure 6.
Premiums the Resolution Trust Corporation Obtained at Resolution
as a Percentage of Core Deposits, Third Quarter 1989 Through First Quarter 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

NOTE: IDTs = insured deposit transfers; P&As = purchase and assumptions.

a. No P&As during this quarter.

122 IDTs resulted in savings of \$74 million, or less than 1 percent of the projected cost of liquidation.) In 1991, however, the average savings from the 165 P&As fell to 3 percent.¹⁵

The value of core deposits has also fallen substantially. In 1988, core deposits were estimated to have saved the FSLIC between 7 percent and 9 percent; IDTs were estimated to have saved about 10 percent.¹⁶ These figures were obtained by relating the savings of using P&As or IDTs to the amount of core deposits held by the failed thrift at resolution. According to the RTC estimates, savings related to core deposits not only were lower than those obtained by the FSLIC in 1988, but also have declined since 1989. Savings related to core deposits from P&A resolutions fell from about

4.5 percent at the beginning of the RTC's tenure to 2 percent by 1992 (see Figure 6). The value of core deposits in IDTs has averaged about 0.7 percent.

Difficulty in Transferring Assets and Liabilities. Even though a purchase and assumption or an insured deposit transfer rids the RTC of the bulk of a failed institution, the amount of assets and liabilities that the RTC is able to transfer in such resolutions appears to be dwindling. The RTC transferred lower percentages of assets in purchase and assumptions in 1991 than in 1990 (see Figure 7). One explanation might be that unacquired assets are difficult to value in the negotiated sale, or the assets may be so bad that the acquirer is unwilling to accept them at a price that yields a net cost savings of the case to the RTC. In other words, the RTC may be retaining more assets because it has to if it wants to accomplish purchase and assumptions.

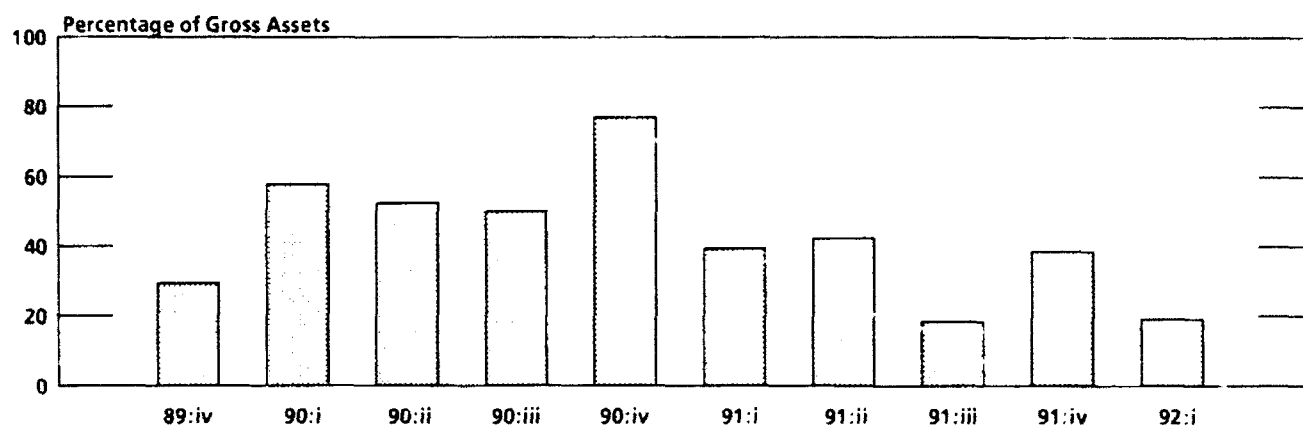
The RTC has been more successful in transferring liabilities (deposits) than assets in resolutions. In P&As, the RTC has transferred roughly 80 percent of the liabilities of failed institutions. The assets and liabilities that the RTC fails to pass on to acquirers must

15. In May 1991, the RTC revised upward its cost estimates of all resolutions. Although the cost of resolution increased 17 percent on average, the RTC's analysis suggests that the liquidation cost of those same resolutions increased more. Thus, the pre-1991 data illustrated in Figure 5 may understate the true savings from using resolution methods other than a liquidation payout.

16. See James R. Barth, Philip F. Bartholomew, and Peter J. Elmer, "The Cost of Liquidating Versus Selling Failed Thrift Institutions," Research Paper No. 89-02 (Office of the Chief Economist, Office of Thrift Supervision, November 1989).

Figure 7.

Transferred Assets as a Percentage of Total Assets of Purchase and Assumption Resolutions by the Resolution Trust Corporation, Fourth Quarter 1989 Through First Quarter 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

be liquidated. The increasing amount of these retained holdings and claims is evidence that the pursuit of institutional sales may be less rewarding than originally hoped.

Put Options. Recognizing the difficulties in transferring assets in P&A transactions, the RTC has incorporated put options in the negotiated sales. These options allow acquirers to return to the RTC certain assets after the sale. The RTC repurchases these assets at full face value (that is, the value when the asset sale was originally contracted), and thus the purchaser temporarily acquires them at no risk.

Originally, the RTC had a policy of not offering asset puts in resolution deals. In March 1990, this policy was changed to quicken the pace of resolution. Since then, the majority of resolutions include put options with terms ranging from 6 to 18 months. Offering put options benefits both the RTC and the acquirer; the RTC could reduce its cost of appraising and maintaining the assets subject to put options, and the acquirer could fully appraise the assets while holding their title. Offering put options has sped up the initially recorded resolution and has increased the chances for an institutional sale.

Of the \$69 billion of assets transferred at the time that each of the 407 P&As and 158 IDTs was resolved, about 37 percent had been returned to the RTC as of December 1992. Table 5 shows the record of "putbacks" of several categories of assets. Securities were the least likely to be returned to the RTC. Mortgages, other loans, and other assets had about a 50 percent chance of being returned to the RTC after an institutional sale.

Offering put options actually delays the completion of the full resolution, though not the RTC's initial recording of it, until the term of the put expires. This delay is acceptable as long as executed puts do not add to the cost of resolution. Arguably, the acquirer bears the administration and maintenance costs of the returnable asset during the time that it holds title. But the ability of acquirers to return assets to the RTC increases the uncertainty of resolution costs and can disrupt planning for asset disposition. Moreover, costs can grow. For example, the acquirer may not fully maintain the value of the returned asset. Six to 18 months is a considerable amount of time for an asset to decline in value. The RTC could impose value-maintenance conditions on asset puts, but doing so would be extremely difficult.

because the RTC did not perform a due-diligence appraisal before transfer. Although asset put options help to speed the start of the resolution process, enhance the likelihood of an institutional sale, and lower the cost of appraising assets, the record of returns and the high likelihood for additional losses makes the practice questionable.

Implications for Strategy

It would be tempting to say that the decline in franchise value and the diminished ability of the RTC to transfer assets and liabilities was because the RTC was resolving thrifts that were in increasingly poorer condition. But data on the rate of loss on assets, which has held fairly constant, indicate that resolutions in 1991 were not likely to be worse cases than those resolved in 1990. A better explanation is that the loss of franchise value simply represents the lowered expectations for profit in the thrift industry and, to some extent, for banks, which can also purchase thrifts and thrifts' deposits. That is, thrifts in general were less attractive to purchasers in 1991 than they were in 1990--and much less attractive than they were in the 1980s.

This conclusion has some important implications for the RTC and the OTS in deciding on a strategy for the last stages of the cleanup.

As the franchise value of thrifts diminishes, smaller cost savings can be obtained from selling either institutions or their core deposits. Since the RTC incurs search costs from looking for buyers and carrying costs from holding institutions in conservatorship, liquidating institutions immediately may be more cost-effective than keeping them in conservatorship for extended periods of time.

Before the 1980s, both the Federal Savings and Loan Insurance Corporation and the Federal Deposit Insurance Corporation were resolving only a very few failed thrifts and banks each year. The most effective and least costly resolution method was to find an acquirer to take most or all of the failed institution's assets and liabilities. When only a very small proportion of thrifts were failing, it was relatively simple to find another thrift to acquire most or all of the failed institution.

During the 1980s, the FSLIC continued to use purchase and assumptions rather than liquidations. As more thrifts became troubled, however, fewer thrifts were healthy enough to absorb failures even though the FSLIC paid acquirers to take on the failed institution's losses. The FSLIC, therefore, sought nonthrift acquirers such as eligible commercial banks, nondepositories, and syndicates of private individuals. Near the end of its tenure, the FSLIC had very little cash and could not af-

Table 5.
Assets Returned to the Resolution Trust Corporation After an Institutional Sale,
Inception Through December 1992

Type of Asset	Gross Sales (Thousands of dollars)	Assets Returned (Thousands of dollars)	Assets Returned as a Percentage of Gross Sales
Securities	20,928	489	2.3
Mortgages	40,103	19,122	47.7
Other Loans	6,437	3,097	48.1
Real Estate Owned	201	153	76.1
Other	1,344	801	59.6
Total	69,013	23,661	34.3

SOURCE: Congressional Budget Office, using data from the Resolution Trust Corporation.

ford to liquidate failed institutions; it resorted to offering substantial and often questionable noncash incentives to entice acquirers to purchase failed thrifts (see Appendix B).

The RTC has continued the tradition of preferring the P&A resolution method and resolving failed thrifts on an institution-by-institution basis. This preference for P&As is understandable because of the potential to obtain franchise value from the transaction and thus to lower costs. But, as pointed out above, the RTC has not been as successful in arranging P&As as was the FSLIC. Moreover, the P&As that the RTC has arranged have not transferred as much of the assets or liabilities to acquirers. By the end of 1990, the RTC had been able to arrange only eight whole P&As, in which all of the assets and liabilities were passed to acquirers.

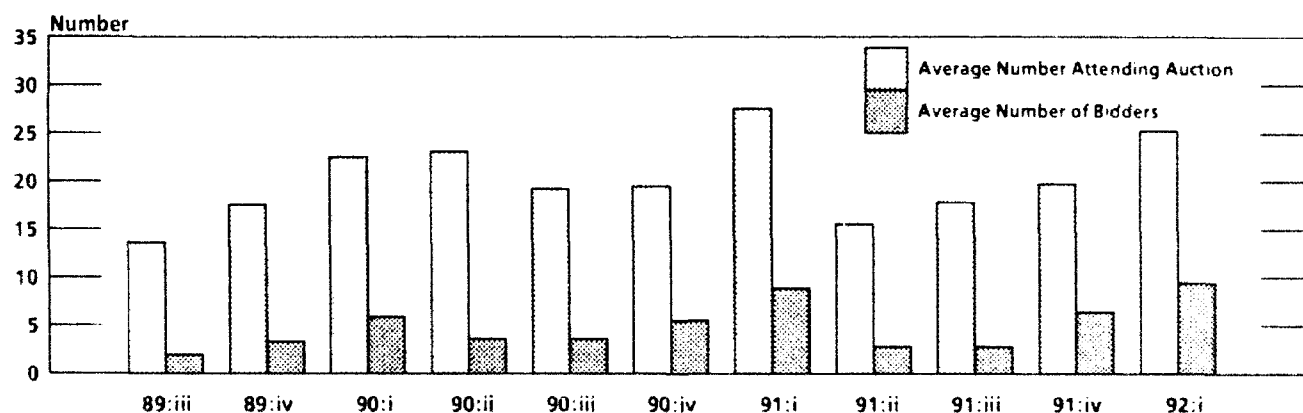
Delaying the disposition of assets and liabilities, which would occur in a liquidation, incurs carrying costs that might have been avoided. These carrying costs include the RTC's general administrative expenses, administrative costs associated directly with continued operation of the failed thrift, and management costs for properties directly owned by the failed thrift. In a liquidation, the quicker a failed thrift can be resolved and

its assets disposed of, the lower carrying costs will be. These costs should be weighed against the potential franchise value of the institution if a P&A can be arranged.

The outlook for P&As is not entirely bleak. Data on RTC auctions of thrifts suggest that there is significant interest among potential buyers, although prospective acquirers may be seeking only thrifts with extensive branch networks. In addition, recent legislative changes, improvement in market conditions, and a relative increase in the value of a thrift charter compared with a commercial bank charter have enhanced the long-term prospects of the thrift industry in general. If the RTC can distinguish between thrifts for which an extensive market exists and those for which there may be fewer buyers, it could devise a more cost-effective strategy than it now employs.

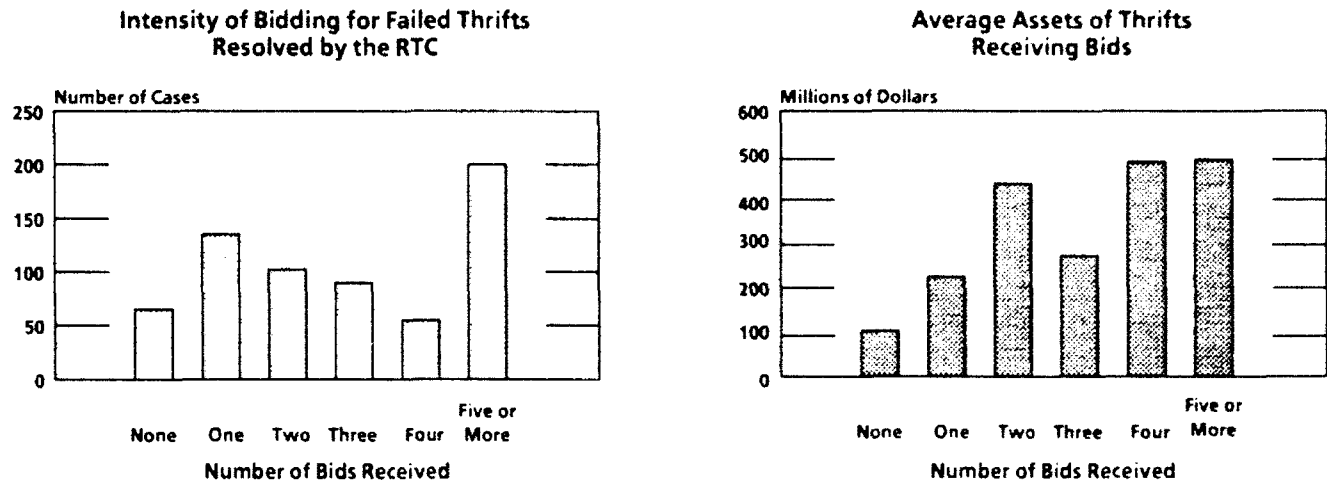
Data on attendance at auctions and the bids submitted for failed institutions show no abatement in bidders' interest in thrifts put up for sale by the RTC (see Figure 8). After a drop-off in attendance and bidders in the second quarter of 1991, the average numbers have shown a steady increase to levels more similar to those in 1990.

Figure 8.
Attendance and Bidding at Auctions for Failed Thrifts, Inception of the Resolution Trust Corporation Through First Quarter 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

Figure 9.
Number of Thrifts Receiving Bids, Inception of the Resolution Trust Corporation Through May 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

The combination of sustained bidding interest and lower cost savings from completed sales suggests that prospective acquirers may be seeking only certain types of institutions. Figure 9 shows the bidding intensity for thrifts resolved by the RTC through May 1992. Of those thrifts for which bids were made, most either received a single bid or more than four bids. Single bids were gen-

erally made for smaller institutions and multiple bids for larger institutions. This pattern reflects the attraction of acquirers for failed thrifts that had extensive operations. Thus, greater targeting of such thrifts for sale, combined with quicker liquidation of those thrifts that are judged to retain less franchise value, may prove to be an effective cost-cutting strategy.

Asset Disposition

As part of the process of resolving failed thrifts, the assets of those institutions pass through the control of the Resolution Trust Corporation. Some of these assets are transferred to buyers of thrifts, who purchase the institution (and part of its assets) and assume some or all of its liabilities. But most of the assets remain with the RTC. A primary goal of the RTC is to sell or otherwise transfer out of government hands all of these remaining assets (plus any additional assets from thrifts that are added to the RTC case-load before October 1993). The RTC is scheduled to transfer the remaining assets it controls in receivership to the FSLIC Resolution Fund by the end of 1997.

The RTC faces the difficult task of realizing the highest possible price for assets that typically will not find buyers unless they are sold at a discount. In addition, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 imposed numerous other conditions on how assets were to be disposed of, including preferences for low-income buyers and concerns for local market conditions. How the RTC handles these conflicting objectives and external constraints will be an important factor in determining the final cost of cleaning up the thrift industry. The more money the RTC receives for the assets it sells, the less the cleanup will cost.

Status of the RTC's Asset Disposition Process

From its inception through December 1992, the RTC took control of 734 thrifts with assets

valued at takeover at about \$396 billion. As of December 31, 1992, it had sold or transferred to private hands all but \$104 billion of these assets--about \$40.2 billion in conservatorships and \$63.4 billion in receiverships. The RTC is charged with the task of removing from its balance sheet the remaining assets under its control.

The RTC deals with the assets it controls in several ways: collection of loans, direct and indirect sales, and securitization. Many of the loans in the portfolios of failed thrifts will be paid off by the borrowers. As these loans are collected--by either receiverships or conservatorships administered by the RTC--the cash received can be used to retire the debts (that is, reduce liabilities) of the failed institution. Collection can take a long time, however, because many of the failed thrifts' loans were long-term mortgages. Moreover, some of the assets are uncollectible (for example, investments thrifts made in land or other property must be sold rather than collected) or are not fully collectible because borrowers have defaulted. To dispose of assets more quickly or to recover whatever value the assets have, the RTC can sell them to someone else, letting the acquirer collect them or sell them again.

As an alternative to selling assets directly, the RTC can contract with private-sector agents to sell them. Such contracting does not constitute either a sale or a disposal until the contractor sells the assets, but it does represent a form of transferring assets to the private sector.

The RTC has also adopted the financial practice of pooling some assets and selling securities collateralized by the pool to the private sector. This practice--known as securiti-

zation--is not truly a disposal or a sale, but it also represents a transfer of RTC assets to the private sector.

Measuring the RTC's Progress in Disposing of Assets

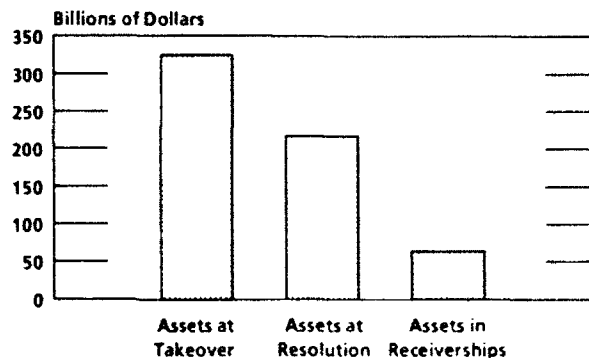
Tracking the Resolution Trust Corporation's progress in disposing of assets is complicated by the fact that many of the assets have lost or will lose value while under RTC control. For example, RTC appraisals of the assets at seizure or resolution are more realistic than the values that were shown in the failed thrift's books before takeover. Reductions in assets because of markdowns do not reflect disposal on the part of the RTC; rather, they result from marking the failed thrift's books closer to the assets' market value.

Assets can also lose value if they are allowed to deteriorate while in the RTC's hands. But the extent to which an asset deteriorates while under RTC control is difficult to ascertain because the true value the asset had when the RTC took control of it is unclear. Reductions in assets because of deterioration while under RTC control also do not reflect disposal; rather, they reflect losses to the RTC.

Because the value of assets in the RTC's control can change--more likely falling than rising--measurement of the RTC's progress in disposing of assets is imprecise. Lacking any better measures, however, this analysis assumes that the degree of markdowns and asset deterioration remains constant over time. Data for the 653 thrifts resolved by the RTC through December 1992 show that their assets were reduced from about \$324 billion when they were placed under RTC control to about \$216 billion at the time of resolution--a reduction of \$108 billion, or one-third of the original amount (see Figure 10).

The value of assets drops further when the thrift is resolved, either as part of a purchase and assumption or an insured deposit transfer. Depending on how one counts assets that are returned to the RTC (through putbacks), the

Figure 10.
Reduction of Assets of the 653 Thrifts Resolved by the Resolution Trust Corporation from Its Inception Through December 1992



SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

resolution of a thrift transfers between 21 percent and 33 percent of its assets on average; the remainder stays with the RTC.¹ The higher figure is obtained by dividing the total amount of assets the RTC transferred to acquirers by the gross assets the RTC reported for those institutions at the time of resolution. But when the assets returned to the RTC after resolution are netted out of the equation, the percentage of assets successfully transferred is much lower--about 21 percent.

Receiverships will ultimately dispose of all remaining assets. By the end of December 1992, the receiverships for the 653 thrifts resolved by the RTC still held about \$63 billion of assets--that is, about 20 percent of the stated value of the original holdings and about 29 percent of the assets held at the time of resolution. As of December 31, 1992, only 27 of the RTC receiverships had been terminated.

The Pace of Disposal

Many observers have criticized the Resolution Trust Corporation for not selling or otherwise disposing of the assets it manages fast enough.

1. These figures are averages and include liquidation payouts, which transfer no assets at the time of resolution.

A substantial portion of retained assets in conservatorships and receiverships--12 percent, or \$12.4 billion--are in the hard-to-sell category of directly owned real estate (see Table 6). Moreover, of the loans the RTC controls, which total \$56.2 billion, more than one-third (\$19.2 billion) are delinquent. Nevertheless, the RTC still retains high levels of cash, investment securities, mortgage-backed assets, and performing mortgages (those on which timely payments are still being made) that are relatively easier to dispose of. Although the RTC has been able to dispose of the majority of acquired assets within the first three years, the final disposal of remaining assets is expected to take an additional four to seven years.

Table 6.
Financial Assets Held by the Resolution
Trust Corporation as of December 31, 1992

Type of Asset	Amount (Billions of dollars)
Loans	
Mortgages for one- to four-family units	16.2
Other mortgages	22.8
Construction and land	9.9
Other loans	7.3
Subtotal	56.2
Real Estate Owned	12.4
Cash and Investment Securities	13.1 ^a
Mortgage-Backed Securities	4.5
Subsidiaries	6.9
Other Assets	10.5
Total	103.6

SOURCE: Congressional Budget Office using data from the Resolution Trust Corporation.

a. Excludes \$13.1 billion in cash, investments (including restricted investments), and accounts receivable accumulated by receiverships.

Measuring Loss Rates on Assets

One way to assess the RTC's progress in disposing of assets is to examine the rate of loss on assets that pass through its control. As with other measures of the RTC's efficiency (discussed in Chapter 4), the loss rate on assets may reflect the condition of the failed thrifts or of the economy rather than simply the RTC's effectiveness. This is particularly the case when comparing the RTC's loss rates with those of the Federal Savings and Loan Insurance Corporation.

The average (mean) loss on assets--measured by dividing the present-value estimate of the thrifts' costs of resolution by the level of their assets--indicates the severity of losses in the thrift industry. Changes in the average loss rate over time come from two sources. First, the quality of assets in the portfolios of institutions in the RTC caseload may become better or worse. Second, the efficiency of the RTC's disposal activities may change--either improving with experience or worsening because of desperation to sell at any price.

The quality of assets in the portfolio of failed thrifts is subject to many factors, making comparisons of asset loss rates over time extraordinarily difficult. One factor affecting the quality of assets, and hence loss rates, is the Office of Thrift Supervision's policy of encouraging thrifts to shrink their business as one strategy for improving their financial condition. If a thrift does this but still fails, more than likely it will have sold off many of its good assets, leaving only the bad ones for the RTC to dispose of. This practice increases the loss rate on assets because the level of the thrift's loss (the numerator) stays about the same, but the total value of its assets (the denominator) declines. The same effect occurs as the RTC disposes of better assets while a failed thrift is still in conservatorship.

The RTC has an average loss rate on its 653 thrift resolutions of about 39 percent. This rate is calculated by dividing the estimated cost of resolution by the gross assets the institution held at resolution as reported by the RTC. The calculation is based on the RTC's revised estimates of resolution cost issued in March 1993. That loss rate is lower, however, if measured using assets the failed thrifts reported in the quarter before their takeover. By that measure, and using the March 1993 estimate, the average loss rate falls to 25 percent. The difference between the two measures reflects the amount of assets institutions lose before resolution (that is, while they are under RTC control). The correct measure of the average loss rate on assets is probably closer to the 25 percent than the 39 percent figure because the smaller figure includes all forms of asset shrinkage while institutions are under RTC control.²

Using data for loss rates based on assets held by thrifts in the quarter before resolution also facilitates comparison between the RTC and the FSLIC. By this comparison, the RTC appears to be more successful than the FSLIC at minimizing losses. During the 1986-1988 period, the FSLIC's average loss rate on the broader measure of assets (that is, in the quarter before resolution) was 30 percent in resolved institutions, compared with the RTC's experience of 25 percent (see Table C-1 in Appendix C). As discussed in Chapter 4, the RTC has accomplished this even though it appears to have been less successful than the FSLIC in arranging institutional sales and in obtaining savings from both purchase and assumptions and insured deposit transfers. Moreover, the actual loss rates the FSLIC experienced are probably higher than initially reported--significantly higher, according to a recent reevaluation by the General Ac-

counting Office.³ Because RTC loss rates are also initial estimates and subject to future revision, a final comparison of FSLIC and RTC loss rates cannot yet be made.

Factors Affecting the Disposal of Assets

Two key objectives of the RTC are to sell loans at the highest possible net return to the government and to do so quickly. But these objectives often conflict.⁴ The most obvious conflict is between the speed of sale and the price received. Sales can be made quickly if the price is low, but that would lower the return. Trying to sell at too high a price, in order to raise the return, can delay the sale and have the unintended effect of lowering the return; because the asset is held longer, the final price of an asset may need to be discounted to attract more buyers.

Three general factors hamper the RTC's ability to overcome this conflict between speed and price of sale: depressed real estate prices and related problems, lack of sufficient market power, and problems related to the cost and management of information.

Depressed Real Estate Prices

One of the major problems facing the RTC is that most of the assets it manages are real estate or claims against real estate. Real estate prices throughout the country currently are at depressed levels, making it difficult for the RTC to recoup much value from these properties. Moreover, some of this real estate (re-

2. The median loss rate on assets of resolved thrifts (that is, the number that lies in the middle of the distribution) is higher than the average (mean) loss rate. The median loss rate using gross assets at time of resolution is about 34 percent for the 653 resolved thrifts and about 22 percent using assets in the quarter before takeover. These loss rates are about 4 to 5 percentage points lower than the mean rates, indicating that loss rates are higher on average at larger institutions than at smaller ones.

3. See General Accounting Office, *Thrift Resolutions: FSLIC 1988 and 1989 Assistant Agreement Costs Subject to Continuing Uncertainties*, Report to Congress (August 1992).

4. See Congressional Budget Office, "The RTC's Loan Securitization Process," CBO Staff Memorandum (July 1992).

ferred to as real estate held or owned) is among the worst on the market. Some properties were obtained by failed thrifts directly through their own investments; others were obtained through foreclosure on defaulted loans.⁵ Management of real estate held is slightly different from that of loan assets because the RTC is directly responsible for managing the value of the property, adding another layer of cost to the RTC's task. In addition, the RTC may affect real estate prices by the way in which it sells its holdings. Dumping assets at below-market prices would lower prices for all sellers.

Most of the mortgage loans in the RTC's asset portfolio are substandard in both performance (that is, timely repayment) and documentation. The failed thrifts that owned these loans were generally in financial and managerial disarray. Not only did they make substandard loans, but their documentation and servicing of them received less than the close attention and vigorous oversight necessary to maintain the loans' value. In some cases, time can improve the quality of substandard loans. When substandard loans are put up for sale quickly, acquirers offer lower bids to reflect their uncertainties about the assets. Thus, selling quickly probably lowers the return, and slower sales could yield higher prices.

Rather than sell these loans, the RTC may hold them in the conservatorship's asset portfolio until resolution. As the loans are repaid, that portion of the portfolio is liquidated. But that takes time. If, as alleged, the RTC is more inefficient than the private sector in servicing these loans, it should operate under the principle of transferring ownership to the private sector as speedily as possible. As will be discussed below, one alternative to the RTC's marketing these loans directly is for the RTC to contract with the private sector to both manage and dispose of these assets--that is, consignments using the SAMDA (Standard

Asset Management and Disposition Agreement) contract. Another alternative, also discussed below, is to securitize these loans. The securitization process allows the RTC to contract a price for the asset before realization of the asset's full true value, which is only known once the loans have been repaid or fully foreclosed.

Market Power

The RTC must pay attention to the competitiveness of the potential purchasers of assets. As a major holder of real estate and financial assets, the RTC should be able to take advantage of its market position to sell at higher prices, but it cannot exploit its position in the market because the fact that the RTC must sell its holdings is widely known. If the RTC sold all of its assets to a single purchaser, then speed of sale and final price would depend on the RTC's bargaining power relative to that of the single purchaser. As more purchasers enter the market, the competition among potential bidders dilutes their bargaining power relative to that of the RTC and improves the RTC's sales price.

A disadvantage of such a retailing strategy--that is, selling directly to a large number of buyers--is that the costs that potential buyers incur in preparing their bids can reduce the value of their bids. Retailing can also add to the RTC's administrative costs because it may require more management information. Thus, selling to a single purchaser or a limited group of purchasers--wholesaling--has some advantages despite the loss of market power. Wholesaling of assets, for example, has the advantage of shifting information and administrative costs from the RTC to the wholesale buyers. The RTC has used both retailing and wholesaling strategies.

Information Costs

Before a sale can be made, the RTC must identify, appraise, inventory, and otherwise prepare an asset so that it can be bought. This process may require extensive legal work,

5. Given that the RTC controls such a high percentage of delinquent loans in conservatorships and receiverships, many of these loans will be transformed into repossessed assets, thus increasing the RTC's level of real estate owned.

especially in ensuring that the title and other records associated with the asset are in order.

The large volume of assets in the RTC inventory requires substantial costs associated with performing a due-diligence audit and appraising, inventorying, managing, and selling the assets. An asset cannot be sold unless the RTC verifies that the thrift held claim to the asset and that all of the paperwork associated with loans and investments of failed thrifts is in order. The value of the asset must be appraised so that the RTC can comply with FIRREA's stipulation that the RTC obtain at least 85 percent of the asset's fair market value in its resale. All of the assets must be inventoried so that the RTC knows what it has available for sale and can satisfy claims against receiverships that control the assets. The RTC must manage the cost of the asset effectively in an effort to preserve its value for resale. The RTC also incurs costs to market the assets. Estimates of all of these costs are very difficult to project, but most analysts agree that they are substantial.

If there were perfect information about the quality of assets under the RTC's control and if bidding for these assets were perfectly competitive, then the RTC could obtain prices for these assets that approached their true private-sector values. But neither of these conditions is fully satisfied. The best the RTC can do is to improve the quality of information on the assets it manages, manage those assets as effectively as possible, and sell them in a market as competitive as possible. As will be discussed in the next chapter, the General Accounting Office has been highly critical of the RTC's management information systems. Further improvements in this critical area are necessary to improve overall efficiency.

RTC Programs for Disposing of Assets

As one would expect, many of the assets that end up in the RTC's hands are difficult to sell;

most of the good assets would have been transferred as part of a thrift resolution. Or, put another way, having good resalable assets is one element that makes a thrift worth buying. Thus the RTC is, for the most part, left with selling assets that nobody wanted. To do so, it must heavily discount the asking price until it finds a buyer willing to take the asset because it is so cheap.⁶

After a thrift has been resolved, the RTC uses three general methods for disposing of the assets it manages:⁷

- o Some assets are sold directly by RTC sales centers through bulk sales, auctions, and other methods.
- o Some assets are assembled into special portfolios that are marketed by private contractors using SAMDAs.
- o The RTC disposes of a substantial portion of assets through its securitization program.

Direct Sales

The RTC sells directly some of the assets it controls. Most of these assets are financial ones such as loans and securities--claims of the thrift against borrowers that may or may not be secured by collateral. Other assets are physical property such as land or buildings.

6. This does not mean that the RTC causes a loss. The discount of the price is based on the value of the asset recorded (or "booked") by the thrift that made the investment. If markets operate well and there is free and perfect information about what is being bought and sold, then the price obtained by the RTC in an asset sale is the current market value.

7. For a more complete description of RTC asset disposition, see General Accounting Office, *Resolution Trust Corporation: Asset Pooling and Marketing Practices Add Millions to Contract Costs*, Report to Congressional Committees (October 1992). The RTC can also actively market assets before resolution while the thrift is in conservatorship. The OTS can also encourage a troubled thrift to sell off its assets before takeover.

The RTC obtains appraisals of the value of the physical property it controls and may sell the property for as little as 85 percent of the appraised value. Appraisals determine value in numerous ways, but all appraisals are estimates of the market value of the asset. For example, appraisers can look at similar properties in the market that have recently been sold and use their sales prices to value the property being appraised. Alternatively, appraisers can value a property by considering it an investment that generates a positive cash flow over time. By making assumptions about expected cash flows, future interest rates, and other variables, appraisers can determine a value.

Selling financial assets requires a secondary market. If the securities are standardized, such as notes and bonds, and if there is a mature market in which these securities are traded, the RTC can readily sell them. If the securities are in the form of loans, there may or may not be a mature secondary market for them. Performing mortgages (those that are still being paid) have a mature secondary market, but nonperforming (or delinquent) mortgages or consumer and commercial loans do not. If a mature secondary market does not exist, then potential buyers will want to scrutinize the credit quality of the loan. The legal paperwork associated with the loan, the ability of the borrower to repay, the principal outstanding, and the value of collateral backing the loan are some of the factors that potential buyers consider when making a bid.

Even after ascertaining that the credit quality of a financial asset is sound, the buyer may not offer full face value for the asset. If the asset is earning a yield that is below market interest rates for a similar asset with the same time to maturity, then the seller must lower the price of the security so that the asset yields a market rate.

The RTC has been successful at selling securities and some performing loans. As discussed above, however, much of the asset portfolio that it controls is in the form of real estate owned, substandard loans, or loans that

do not have a developed secondary market. Some types of financial assets are sought by companies that specialize in collecting nonperforming loans that may or may not be standardized. For example, retailers often sell some of their loans to specialized collection agencies to finance the purchase of goods. These agencies require considerable information on loans that they purchase in order to place an accurate value on them.

To help the RTC broaden the market for its assets, the RTC Oversight Board approved a \$7 billion pilot program for seller financing in December 1990. About \$2 billion of assets were sold with RTC financing between March 1991 and November 1992. Seller financing is a common retailing practice. For example, many department stores offer their own plans of revolving credit to their customers, and automobile manufacturers offer their customers financing from a corporation that the manufacturer owns. In the case of the RTC, the aim of seller financing is to speed up the disposal of assets and both widen and deepen the market. More buyers can be found that can afford the acquisition, and smaller acquirers can be attracted because they would need less cash up front.

A fundamental problem the RTC has with seller financing is that it replaces an asset from an RTC-controlled institution with an asset that is a loan to the acquirer. The loan is collateralized by the sold asset, but the value of this collateral was questionable in the first place. Financing sales in this way increases the risk to the RTC and adds the cost and requirements associated with retail sales financing because the RTC must perform credit checks on acquirers and collect on the loans it makes. Although these costs may be offset by the gains from widening and deepening the pool of potential buyers, which may yield higher returns on asset sales, it is unclear that the offset is profitable.

In addition to facilitating sales, seller financing allows the seller to offer multiple pricing of a single good. The buyer must consider both the price of the good and the cost of

financing the good through the seller. Buyers can choose between immediate payment and payment over time. The trade-off for the buyer is paying more cash at the time of sale versus making smaller cash payments over a period of time that sum to a greater amount than an immediate full cash payment. Although the seller receives less cash immediately for sales, it profits from offering the financing. The seller also benefits from increasing its volume of sales. There is a risk to the seller in offering financing--as with anyone who offers credit--that the customer will default.

Consignments Using SAMDAs

The RTC has employed private contractors to dispose of assets using the Standard Asset Management and Disposition Agreement established by FIRREA. Using private contractors to dispose of assets can be more efficient for the RTC than doing the job itself if the agreement includes incentives for the private contractors to lower their transaction and carrying costs.

The SAMDA program was delayed in getting started; the first SAMDA contract was executed on August 30, 1990. Since then the RTC has been adjusting the structure of the SAMDA program to ensure responsible, prompt, and efficient disposition of assets through private contractors.

The RTC pays SAMDA contractors two types of fees: a monthly fee for managing assets, and a one-time disposition fee for each asset sold. According to the General Accounting Office, management fees have averaged about 1 percent of a portfolio's asset value per year.⁸ Disposition fees have averaged about 2 percent of the asset's net selling price.

The classic problem with selling assets on consignment is that the incentives for private

contractors must be structured in such a way that they do not disadvantage returns on asset sales. Paying contractors solely on the basis of the volume of assets that they handle can delay sales and gives contractors little incentive to preserve the value of assets under their control. This delay increases the carrying costs of RTC-managed assets.

The SAMDA contract addresses this issue by also compensating contractors on the basis of the price obtained when the asset is sold. Since SAMDA contractors obtain a percentage of the selling price, they have an incentive to seek higher prices for the assets they manage. In part, contractors obtain higher prices by maintaining the quality of assets that they manage for the RTC.

The General Accounting Office has been critical of the RTC's management of SAMDA contractors.⁹ Much of its criticism focuses on the poor quality of RTC management information systems, which do not adequately monitor SAMDA contractors and have led to the wrong types of assets being placed under SAMDA contracts. These contracts are especially useful for assets that are difficult to sell, such as nonperforming loans and real estate. It is not clear that SAMDA contracts are necessary for assets that are easier to sell, such as performing loans.

Securitization

Securitization allows the RTC to pool its holdings of several mortgage loans into a single financial asset. The packaged asset is sold in a so-called passthrough security issuance--that is, the RTC passes through to the buyer of the security the interest and principal payments made on the mortgages in the package. Investors who buy these packages receive a fixed rate of interest and a return of principal as the loans in the pool are repaid.

8. See General Accounting Office, *Resolution Trust Corporation*.

9. Ibid.

Securitization is a common practice in financial markets.¹⁰ Over the past decade, financial markets have seen an increasing switch between traditional lending and securitization. In traditional lending, the lender originates the loan and holds the financial claim against the borrower until the loan is fully repaid--that is, until maturity. In securitization, the lender originates the loan and then sells the financial claim to another financial institution or to individuals. Successful securitization typically requires a mature secondary market. Securitization permits lenders to lower their liquidity risk--that is, increase their ability to convert assets into cash.

The recent phenomenon of securitization in the United States encompasses two separate developments. The first was the collection of large numbers of illiquid loans, such as mortgages, into pools that collateralize the securities issued.¹¹ Residential mortgages were relatively easy to securitize because the mortgages were fairly standardized and because government agencies that underwrote the securitized issues enhanced the credit by guaranteeing payment of interest and principal to the purchasers of the securities. The second development was the securitization of other types of financial claims such as consumer loans--notably automobile loans and amounts owed on credit cards. Securitization in this area was slower to develop than securitization of mortgages because the assets were less standardized and because secondary markets had to develop experience in judging the overall credit quality of the pools.

The development of securitization in the private sector--albeit with government assistance--reflects some of the obstacles for RTC

securitization. Although many of the assets under RTC control are readily securitized, others are not. Securitization requires that a mature secondary market exists for the securities issued, that the assets being securitized are standardized, and that the pool is fairly homogeneous (that is, similar types of assets are placed into the pool). Securitization also requires that the originator make arrangements for servicing the loans (that is, collecting payments of interest and principal and dealing with or foreclosing on loans in default). This is a complicated process to which the RTC has devoted considerable attention.

The RTC has treated securitization as if it were equivalent to selling all of the loans in the asset pool at a fixed price. Like sales financing, however, securitization does not completely dispose of the asset, nor does it truly fix the price.¹² Rather, because the RTC retains nearly all of the risk of repayment of interest and principal, it effectively retains an equity interest in the loans, and the final sales price of those loans depends on how well they perform over time.

To raise the price of the passthrough securities and to assure a fast sale, the RTC retains the risk of losses on the loans in the pool up to a loss rate that could be expected during a period like the Great Depression. This guarantee against loss has been estimated to be between four and seven times conservative estimates of expected losses. In anticipation of some loss on the assets that it pools, the RTC has established a reserve against the value of assets it securitizes, although that reserve is much less than the full amount needed to back up the RTC's guarantee. If losses are incurred, they are charged to that reserve, and the RTC realizes a correspondingly lower amount than the securitization price initially reflected. Losses exceeding the funds in reserve are absorbed by the RTC.

10. See Robert E. Litan, *The Revolution in U.S. Finance* (Washington, D.C.: Brookings Institution, 1991).

11. This form of securitization was launched by three government entities that finance housing--the Government National Mortgage Association, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation--in order to enhance the liquidity of mortgage lending institutions. Increasing the lenders' liquidity lowered the cost of residential mortgages and the lenders' liquidity risk.

12. For a full discussion of the RTC securitization program, see Congressional Budget Office, "The RTC's Loan Securitization Process."

Despite these problems, securitization offers several advantages to the RTC. First, it permits the RTC to pool assets and spread the risk of any single asset to the pool. Second, it permits the RTC to dispose of assets quickly. Although not strictly a sale, securitization enables the RTC to dispose of its portfolio more quickly than it could through individual asset sales. Securitization also benefits the RTC by expanding its pool of bidders. If the RTC correctly prices the pooled assets, securitization may prove to be the best available strategy for achieving its mandated objective of selling assets quickly at the best price.

Nevertheless, because the securitization program leaves the RTC with most of the risk of loss on assets in the securitized pool, it is less than the ideal strategy. Because the RTC does not sell the asset but only a claim against

the income from a pool of assets, the RTC is effectively borrowing funds through the sale of securities using these pooled assets as collateral for the loan. Such a collateralized loan may not be the best strategy for disposing of assets because the RTC can borrow from the Federal Financing Bank at the Treasury borrowing rate. Securitization is costly because market rates on these securities are on the order of 100 basis points (that is, 1 percentage point) higher than rates of equal maturities on Treasury borrowing.

Another problem with securitization is that the RTC must decide how much of each type of asset to include in the securitization program. As with other decisions about allocating resources, putting too many assets into the program can lead to bottlenecks in the overall asset disposition process.

Options for Improving the Thrift Cleanup

Most of the costs of the thrift cleanup were incurred before the Resolution Trust Corporation was created. Those losses cannot be avoided. They occurred when thrifts took in deposits that were guaranteed by the federal government--often promising high rates of interest on them--and made loans and investments that ultimately went sour.

The RTC, however, has a key role in determining the final cost of the thrift crisis by both helping to avoid further thrift failures and maximizing the return to the public from selling the remains of thrifts that have already failed. Several specific options for improving the RTC's efficiency are discussed in this chapter. Keep in mind, however, that although the possible cost savings from implementing one or more of these options are potentially measurable in billions of dollars, they are small relative to the total size of insured deposits at the failed thrift institutions and to the total costs of resolving those thrifts.

Improving the RTC's efficiency, however, is not the only important policy issue concerning the thrift cleanup. The RTC virtually exhausted its appropriation in April 1992. Although it is still taking on new conservatorships formed for failed thrifts seized by the Office of Thrift Supervision, the RTC lacks the appropriations needed to resolve them. In 1992, the RTC estimated that this delay in funding increased its costs by about \$200 million to \$250 million per quarter. The RTC, moreover, is scheduled to cease taking failed

thrifts from the OTS in October 1993. It will continue to resolve those institutions it controls in conservatorship and to dispose of assets and liabilities it controls in receivership, but the Savings Association Insurance Fund will inherit the responsibility for new thrift resolutions.

These circumstances give rise to important policy questions. How much money will be needed to resolve the thrifts the RTC now controls in conservatorship? How much additional funding is required for thrifts that the OTS plans to transfer before October 1993? If the RTC ceases to take new failures after its term expires, how many failed thrifts will the SAIF have to resolve, and does the SAIF have the resources to deal with this caseload? If the SAIF's projected caseload is so large that its resources are depleted before it has a chance to become operational, does it make sense to terminate the RTC as scheduled or to increase the funding for the SAIF?

Answers to these policy questions hinge on the fundamental question of how much of the thrift crisis is left to be cleaned up. This question continues to be debated. Uncertainty about the solvency of currently undercapitalized thrifts and the future viability of the thrift industry in general results in differing views on the extent of the cleanup that remains.

The first section of this chapter discusses the strategic options available to policymakers for completing the cleanup. The second

section discusses specific options for improving the RTC's efficiency, thereby lowering the cost of the cleanup and reducing the money needed to finish the job. Although these options are directed toward RTC operations, some may be appropriate for its successor's operations.

Strategic Options for Dealing with the Remainder of the Cleanup

One of the central policy decisions to be made over the next year is whether the resolution function of the RTC should be terminated in October 1993, as scheduled. Alternatively, its term could be extended again to allow the RTC to finish the job it started and to permit the SAIF to begin operations with a clean slate, unburdened by the need to clean up the remnants of the thrift crisis.

Projecting the Remaining Cost of the Cleanup

A key element in this policy decision is to determine how much of the thrift cleanup remains to be completed. Making precise estimates is difficult because of the uncertainties about how many more resolutions will be done, how much they will cost, and how long it will take. The projections of the Congressional Budget Office have differed from those of the Department of the Treasury, which are the official estimates offered by the Bush and Clinton Administrations. In turn, some of the Treasury's projections have differed from those reported by the RTC or the OTS.

Bush Administration's Projections. In May 1990, the Bush Administration projected that between 800 and 1,000 thrifts would require resolution (this estimate included the 124 thrifts the RTC had resolved through May

1990, but not the 489 resolved by the Federal Savings and Loan Insurance Corporation since 1980). The cost of these resolutions was given in 1989 dollars as ranging between \$89 billion and \$130 billion. This projected range--which was \$39 billion to \$80 billion higher than the Bush Administration estimated when the Financial Institutions Reform, Recovery, and Enforcement Act was being drafted--did not change much. The Treasury's opinion of where the true cost lay within the range did change, however, and its budget request for nominal dollars associated with the projection also changed.¹ In October 1991, the Treasury requested \$80 billion for RTC appropriations in addition to the \$80 billion that had already been appropriated. This request was based on the Treasury's opinion that the final cost of the cleanup would be close to the high end of the range it reported in May 1990.

In February and again in July 1992, the Treasury repeated its May 1990 projection range. In July 1992, it projected that an additional 236 thrifts would require resolution by the RTC (in addition to the 652 resolutions done through July 1992)--presumably by the September 30, 1993, deadline for the RTC to deal with new failures. The Treasury estimated that an additional \$55 billion budget cost would be incurred to finish the resolutions. In requesting this amount, the Treasury assumed that the Congress would appropriate the unused balance of the \$25 billion appropriated in the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act in December 1991 for resolutions through March 1992.

There was some confusion about the Bush Administration's projections during 1992. The \$71.8 billion the Treasury requested--\$55 billion plus \$16.8 billion the RTC had not used from the RTCRIA appropriation--seemed

1. The projected range of \$89 billion to \$130 billion was stated in 1989 dollars and was on a present-value basis. Since the RTC was expected to spend cash for resolutions over several years, it needed a larger appropriation in nominal dollars.

very high if only 236 more thrifts were projected to require RTC resolution.² Moreover, the RTC and the OTS offered their own projections, which were different from the Treasury's and were viewed by many as overly optimistic. Most of the confusion stemmed from the fact that both the RTC and the OTS made their projections using assumptions about the caseload and timing of future resolutions that were different from the Treasury's.

President Bush's January 1993 budget release did not reveal his Administration's last estimate of the cost of the thrift cleanup. It probably reflects losses at the lower end of the Treasury's May 1990 projected range of \$89 billion to \$130 billion (in 1989 dollars).

Clinton Administration's Projections. In March 1993, the Clinton Administration offered its first projection of the cost of the clean-up.³ Under the assumption that the RTC would cease taking institutions for resolution on September 30, 1993, the Treasury Department made a point estimate for resolving the remaining RTC caseload. That estimate, which includes conservatorships the RTC administers and thrifts that are expected to be transferred to the RTC before October 1993, was \$19 billion. Adding this \$19 billion to the \$85 billion the RTC had committed through the end of 1992 brings RTC costs to \$104 billion. The Treasury also made a point estimate of \$13 billion in losses for the SAIF through 1998. The Treasury included \$2 billion in losses for thrifts that could be resolved by either the RTC or the SAIF but whose projected timing of seizure was too close to call. The Treasury's point estimate for the entire clean-up--fiscal years 1989 through 1998--is \$119 billion in nominal dollars.

Recognizing that point estimates are uncertain, the Treasury also provided a likely high estimate of the loss: \$112 billion for the RTC, \$17 billion for the SAIF, and \$3 billion for either the RTC or the SAIF, for a total cost of \$132 billion. Based on this high estimate, the Treasury requested \$45 billion of additional funds for the cleanup.

CBO's Projections. In January 1993, CBO estimated that the cost of the thrift clean-up--from the RTC's inception through fiscal year 1998--would be about \$120 billion (in 1990 dollars) plus or minus \$15 billion. On a comparable basis, this estimate is probably higher than the point estimate reflected in the Bush Administration's last projection, but it lies within the range of that Administration's May 1990 estimate. The CBO estimate is only slightly higher than the Clinton Administration's March 1993 estimate, but that March estimate lies well within CBO's range.

CBO's projection assumes either that the RTC's term will be extended or that the transition from the RTC to the SAIF will not be costly. It also assumes that the RTC will receive funding in the spring of 1993. CBO foresees nominal losses of \$51 billion through fiscal year 1998. This estimate includes losses at thrifts currently in conservatorships as well as future closings. An estimated \$8 billion in insurance premiums (paid to the SAIF) and remaining appropriations for losses can be used to offset these nominal losses, leaving a gap of \$43 billion. Adding the \$43 billion to the \$85 billion committed to date yields a cost of \$128 billion in nominal dollars. On a present-value basis and in 1990 dollars, the estimated cost of the 1989-1998 cleanup is \$120 billion.

If the remaining cleanup is in the range CBO projects, the caseload will be greater than the RTC can handle before October 1993. Cases not dealt with by the RTC will have to be resolved by the SAIF. The SAIF currently exists only on the books of the Federal Deposit Insurance Corporation, which administers it: the fund has minimal financial resources. Yet the SAIF may need as much as \$33 billion of funding to deal with thrift resolutions (net of

2. Statement of Nicholas F. Brady before the House Committee on Banking, Finance and Urban Affairs, July 29, 1992.

3. Statement of Lloyd Bentsen, Chairman of the Thrift Depositor Protection Oversight Board, before the House Committee on Banking, Finance and Urban Affairs, March 16, 1993.

its projected premium income). Even with a \$33 billion appropriation, the SAIF will need some capitalization.

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 and subsequent legislation anticipated that the SAIF might need Treasury funding to build up sufficient cash reserves and therefore authorized two types of annual payments for this purpose. One authorization provides for a payment each year through 2000 equal to the difference between \$2 billion and the annual premium assessments insured thrifts pay to the SAIF. The second authorization provides for payments to maintain the SAIF's net worth according to a designated schedule starting at \$1 billion for the beginning of fiscal year 1993 and increasing to \$8.8 billion for the beginning of fiscal year 2000. CBO estimates that the SAIF needs about \$7 billion to be sufficiently capitalized.

The Federal Deposit Insurance Corporation has authority to borrow up to \$30 billion to allow the SAIF to finance insurance losses. The SAIF, however, shares this line of credit with the Bank Insurance Fund. The amount of such borrowing is constrained by the legal requirement that the FDIC and the Secretary of the Treasury agree on a repayment schedule. This schedule must show that income from premium assessments will be sufficient to pay both principal and interest on the loan. Although the SAIF could use this borrowing authority to resolve some thrift failures if funding for the RTC and the SAIF is insufficient, the constraints on this authority make it an infeasible source.

Extend the RTC's Deadline or Again Restructure the Cleanup

In March 1992, the RTC announced plans to reduce staff substantially and to start closing field offices. This announcement obviously anticipated the September 30, 1993, deadline and appears to have been made on the basis of the more optimistic projections of the OTS and

the RTC with regard to the remaining costs of the cleanup. When the term of the RTC's resolution function expires in October 1993, more staff will be transferred back to the Federal Deposit Insurance Corporation, from which they were temporarily assigned. The FDIC, which operates the SAIF, would presumably use these and other staff resources to deal with any remaining failed thrifts.

An alternative is to extend the RTC deadline. Having the RTC complete the cleanup would avoid further complicating the already confusing issue of funding. Furthermore, the RTC could continue to use its experienced staff in an administrative structure that is familiar to its employees. Extending the deadline could help avoid a costly delay in the resolution process. Extending the RTC's deadline is unlikely to add further cost to the cleanup. Even if the cleanup of failed thrifts is nearly over, a short delay in winding down operations would probably be less expensive than the potentially high costs of transferring responsibilities to the SAIF.

Another alternative is to merge the Resolution Trust Corporation with the Federal Deposit Insurance Corporation by placing it under the FDIC's administration. This option could avoid the administrative problems associated with transferring the RTC's resolution function to the Saving Association Insurance Fund in October 1993 and the RTC's asset disposition function to the FSLIC Resolution Fund in January 1997. Personnel and other resources could be transferred from the RTC to the FDIC without a merger, but disruptions from reassigning personnel and equipment could be minimized by having the FDIC absorb the RTC all at once. Personnel and equipment could be distributed internally within the FDIC (rather than shifted from one agency to another) while the RTC continues to perform its functions.

The drawback of this option is that the Clinton Administration would be less directly involved with the thrift cleanup. The RTC initially was under the FDIC's administration, but its strategic policies were set by the

Oversight Board. Although this arrangement was cumbersome and inefficient, it provided the Administration with some control and oversight of the cleanup. But at this stage such oversight and control may not be as necessary as when the RTC was established. Some policymakers may be concerned, however, about creating a single agency with such extensive authority and responsibility without direct oversight by the Administration.

Regardless of whether the RTC's term is extended, certain options are available for improving the efficiency of its operations. If the RTC's term is extended, these options could save significant sums. If the RTC's term is not extended, some of the options still would apply, and others might be appropriate for the SAIF to carry out.

Options for Improving the RTC's Efficiency

Three general types of reforms of RTC operations are discussed below. Specific options for changing RTC policies are suggested under each of the three general types. These options do not constitute all possible options, nor are they presented in any order of preference. Some of the options are contingent on the use of other options. Many of them parallel reforms announced by Treasury Secretary Lloyd Bentsen in conjunction with his March 1993 release of the Clinton Administration's estimate of the final cost of the cleanup.⁴

A fourth and probably more significant set of actions lies outside the RTC's purview and therefore is not dealt with in detail here. Responsibility for these actions--namely, maintaining the health of those thrifts that have survived and promptly closing those that fail--falls primarily to the Office of Thrift Supervision in its role as the primary regulator of

the thrift industry. The RTC, however, can greatly affect the survivability of the remaining thrifts by how well it handles its own responsibility for resolving the failures. Some of these interactive effects between thrift resolutions and the viability of remaining thrifts are touched on in the discussions below.

Three areas of the RTC's responsibilities are potentially subject to improvement:

- o *The way it resolves failed thrifts.* Options presented below include accelerating the pace of resolutions, combining RTC-controlled thrifts for institutional sales, requiring the RTC to liquidate failed thrifts in its caseload, shifting responsibility for some early resolutions to the OTS, and lowering the cost of liabilities in RTC conservatorships.
- o *The way it disposes of assets.* Options include repackaging assets for "junkyard sale," changing the bidding process for assets, relying more on private-sector management of assets, and eliminating RTC financing of asset sales and securitization.
- o *The way it operates its own organization.* Options include improving the RTC's oversight of contracting operations and improving its management information systems.

These options should be evaluated on the basis of their ability to save taxpayers' money while closing the books on the cleanup of the thrift industry as quickly as possible. The advantages and disadvantages of each option are discussed primarily on the basis of cost-effectiveness, but other factors are mentioned where appropriate.

The exact values of the benefits and costs associated with each of the identified options are difficult to ascertain. Even if they account for only 1 percent of the total cost of thrift losses, they would represent a substantial sum. It is unclear whether some of the options would result in net benefits, and although implementing all of them may not be desirable

4. Statement of Lloyd Bentsen, March 16, 1993.

or feasible, certain specific features of each option could be adopted on their own or in combination with other options. The underlying strengths and weaknesses of the options, moreover, further illustrate the difficulties encountered in trying to improve the operation of the RTC. Several of the reform options could be carried out administratively.

Change the Resolution Process

A radical change that the RTC could make would be to alter the resolution process by shifting the focus from sequential resolution of institutions to a more aggregate approach. The importance of changing the resolution process may have diminished because the RTC's caseload is now substantially smaller than it was when the RTC commenced operations in 1989.

Several proposals for reform of the RTC's resolution process were made before passage of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991.⁵ In particular, critics have been urging that the RTC abandon its policy of resolving failed thrifts on an institution-by-institution basis. That policy favors institutional sales over liquidations and was inherited from the FSLIC and the FDIC, which were faced with resolving a small number of failed institutions each year.

Because the RTC is required to resolve failed thrifts at the lowest cost, it has continued the FDIC and FSLIC practice of first attempting an institutional sale through a purchase and assumption, which typically would be less costly than other methods. As described earlier, the ability of the RTC to arrange a P&A rests with the value of a failed institution as an ongoing concern. If the RTC can capture a franchise value that is higher

than its costs for seeking an acquirer, then net resolution costs of an institutional sale would be less than those of a liquidation.

The RTC has not been as successful as the Federal Home Loan Bank Board and the FSLIC appear to have been in recovering franchise value when thrifts were resolved through institutional sales.⁶ Even if the franchise value captured by the FSLIC was overstated, evidence presented in Chapter 4 supports the claim that the benefits of institutional sales relative to those of liquidations are small on average.

Although the RTC has been able to attract a higher average number of bidders, the bidders seem to concentrate on larger institutions. Potential buyers may be less able to profitably absorb failed institutions unless the purchased institution offers a sufficiently large franchise value. The value of a thrift charter radically diminished after passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, but it may be increasing; commercial banks were not granted some of the expanded branching and investment powers the Treasury proposed in 1991, thus presenting an advantage for thrifts. But the recent increase in value of the thrift charter may not apply equally to all of the thrifts the RTC controls. Bidders apparently recognize certain economic advantages in obtaining thrifts with large operations, but smaller institutions do not seem to garner as much interest.

This pattern suggests rethinking the resolution process. This process traditionally was viewed as beginning at takeover and finishing when receiverships were terminated. In the post-FIRREA environment, the process has been extended to include the supervisory

5. See, for example, Task Force on the RTC, *Report to the Subcommittee on Financial Institutions Regulation, Supervision and Insurance* (March 11, 1991).

6. Franchise value may be low in an industry with excess capacity, but one must be careful in comparing the RTC's and the FSLIC's recovery of franchise value. As mentioned earlier, the franchise value of FSLIC-resolved thrifts may have been overstated because of poor estimates of resolution costs and the inclusion in deals of noncash incentives such as tax benefits.

actions taken against troubled institutions before takeover.⁷

Supervisory actions before takeover have limited effectiveness in curing fundamental problems, but they can curtail additional losses or unfair distributions of the troubled thrift's assets to managers, directors, and owners.⁸ Recognition that the resolution process actually starts when such intermediate supervisory actions are taken, moreover, allows for some restructuring of the resolution process.

Five options for changing the resolution process are discussed below. The first option focuses on the speed of takeover and resolution; the next three focus on the method of resolution; the last relates to conservatorships. These options contain some common features. Each addresses problems associated with institutional sales and the practice of institution-by-institution resolution.

Radically Accelerate the Pace of Resolutions. One option, suggested in a proposal known as "Total Clean Sweep," would substantially speed up the takeover of troubled institutions and accelerate the pace of resolutions.⁹ Under this proposal, all thrifts identified as candidates for RTC resolution would be immediately taken over and their insured liabilities (deposits) resolved. This provision would limit the time that a troubled thrift is left open. It would also permit the RTC to focus on asset disposition rather than institutional sales because, from an operational perspective, insurance actions that settle insurance claims against resolved thrifts could be settled fairly quickly, assuming the RTC had sufficient cash resources.

"Total Clean Sweep" differs from the current resolution process in that it would resolve insured deposits first. In essence, the method of resolution would be more similar to a liquidation than a traditional P&A institutional sale, although "Total Clean Sweep" incorporates some aspects of a P&A by permitting the transfer of some liquid assets and branch offices with deposit sales. This approach would allow the RTC to offer acquirers incentives to bid on the deposits of the closed thrift.

As proposed, the "Total Clean Sweep" approach precludes institutional sales. But it would not necessarily require liquidation payoffs—rather, it emphasizes the use of insured deposit transfers. The RTC could settle insurance claims against seized institutions within three months by auctioning off their insured deposits to healthy institutions; if insured deposits could be sold in an IDT, the RTC would pay off insured depositors. This approach would effectively resolve most of the failed thrift's liabilities. Assets and uninsured liabilities would be resolved through liquidation in a receivership. Proponents of this idea argue that although institutional sales seek to capture an institution's franchise value, most of any franchise value in a seized institution rests with its core deposits.

"Total Clean Sweep" has some disadvantages. First, the number of candidates for immediate takeover is subject to debate and has diminished since the idea was first proposed in 1990. Early closure rules in the Federal Deposit Insurance Corporation Improvement Act of 1991 define explicitly the point at which takeover should occur. Though designed to recognize that most thrifts are insolvent based on market value before they are insolvent based on book value, this rule probably would

7. The focus on supervisory actions taken before takeover was enhanced by the new statutes for mandatory enforcement actions prescribed by the Federal Deposit Insurance Corporation Improvement Act of 1991. These new rules for earlier closure require that regulators more promptly close failed institutions and take corrective actions before closure when the institution's book-value capitalization falls below certain positive levels. These corrective actions could restore the troubled institution. If they do not, they have the potential for limiting losses to taxpayers or the insurance fund by curtailing the ability of a troubled institution to incur further losses.

8. Individuals obtained benefits from troubled institutions that were ultimately resolved. Managers and directors extracted inappropriately high salaries or other compensation. Shareholders received dividend payments. These payments were inappropriate, and for the most part they were unrecoverable.

9. This proposal was suggested in Robert E. Litan, "Getting Out of the Thrift Crisis, Now!" *The Brookings Review*, vol. 9, no. 1 (Winter 1990/1991).

exclude many thrifts that are market-value insolvent but, through innovative accounting techniques, are still in compliance with book-value capitalization requirements. If this trigger were used, the "sweep" would be only partial--many insolvent institutions would escape. Applying other rules for estimating thrift failure, however, would be arbitrary and hence contentious. Many rules would make the mistake of identifying for closure some solvent institutions that should be left open.

Opponents of "Total Clean Sweep" argue that some institutions, even insolvent ones, that would be seized under the proposal would still have their franchise value and that part of this value would be lost even if IDT liquidation techniques were used. Some of the franchise value in a thrift--for example, loan sales and collection personnel--could be lost by "Clean Sweep." Sales networks and existing customer relationships clearly would be jeopardized but not necessarily lost. The IDT's use of bulk deposit sales that include existing branch networks could preserve some of the franchise value associated with the assets of thrift operations.

Radically accelerating the pace of placing failed thrifts into RTC control would increase the RTC's caseload and cause additional costs of carrying and resolving the enormous inventory of assets that the RTC would suddenly acquire.¹⁰ Nevertheless, if thrifts are going to fail irrevocably, then their speedy removal from the private sector would benefit the operation of healthy thrifts. There are high costs associated with delaying the closure of thrifts that have truly failed in an economic sense. The potential benefits from accelerating the pace of closure and the degree of acceleration must be weighed against both the cost of adding more assets to the RTC's inventory and the cost of closing some institutions prematurely.

Although this option may have made sense early in the resolution process, the time may have passed for the drastic strategy of seizing all troubled thrifts instantaneously. A significant number of troubled thrifts have yet to be resolved, but the remaining RTC resolutions seem to be less difficult cases than those dealt with already, and the danger of seizing solvent thrifts and losing franchise value may outweigh the benefits of early closings on a large scale. Even a modest degree of acceleration in the pace of closure, however, may help to lower costs.

Repackage RTC-Controlled Thrifts for Institutional Sales. The RTC currently resolves each failure on an institution-by-institution basis, a process that preserves the legal entity that is being resolved, but virtually precludes any potential benefits that may be governed by repackaging thrifts in P&A resolutions. The benefits from such institutional repackaging could arise because bidders may prefer certain types of property or unique combinations of property that can best be assembled by the RTC before being offered for bid.¹¹

This option would encourage the RTC to combine and repackage the assets and liabilities of thrifts in its caseload into new thrifts. Some of these new thrifts could then be sold--and at prices potentially more attractive than piecemeal sales would yield. If such repackaging makes the assets and liabilities more valuable to prospective buyers, it would help speed up the P&A process and lower the overall cost of resolution for the RTC.

Although this option would increase the RTC's administrative costs, it may result in a higher overall return. Not all of the assets and liabilities of the thrifts targeted for this practice need be included in the repackaged new thrifts. Certain difficult assets or unattractive liabilities could be left for the liquidation and asset disposal process.

10. See, for example, the letter from Robert D. Reischauer, Director of the Congressional Budget Office, to the Honorable Bruce Vento, Chairman of the RTC Task Force, December 11, 1990.

11. Ibid.

In addition to the uncertainty over whether the final total value of thrifts' assets would increase, this option has two distinct disadvantages. First, repackaging would make it difficult to determine that the resolution of each thrift was accomplished in least-cost fashion. Adoption of repackaging would require abandoning the least-cost test on an institution-by-institution basis. Second, the paperwork associated with tracing each receivership and correctly disposing of claims would increase the administrative costs of resolving thrift institutions.

Require the RTC to Use Liquidations Rather Than Purchase and Assumptions.

It may be advisable for the RTC to rethink its policies on institutional sales. The costs of seeking acquirers for institutional sales may outweigh the benefits of avoiding liquidation. Abandoning the use of P&As altogether, however, precludes the potential gains that might be had from selling some institutions. The RTC might benefit from discriminating earlier in the resolution process and moving faster to liquidate.

If the value of the thrift charter is indeed increasing, or at least stabilizing, some troubled thrifts not yet in the RTC's control may be candidates for institutional sale regardless of their size. The OTS could make this determination when it classifies the institution as troubled, but before it transfers the institution to the RTC. One action could be to require the institution to arrange its own sale under OTS oversight, similar to the current Accelerated Resolution Program. Failure to find an acquirer would mean that the thrift has no value as an ongoing concern. With this determined, the RTC would not need to waste money or effort in trying to sell it. The RTC could instead concentrate only on liquidating the institution's assets and liabilities.

The major disadvantage to this proposal is that it restricts the RTC to resolving thrifts through liquidation and assumes no possible cost reductions from institutional sales. Another disadvantage is that, like the ARP, it gives additional responsibilities to the OTS

but imposes the costs on the RTC. Thus, responsibility for the costs of the program would lie with the RTC, even though the RTC would have no say in how these costs were incurred.

The potential financing and control problems of permitting the OTS to supervise mergers could be addressed through explicit agreements or legislation. Given the evidence of poor prospects for institutional sales by the RTC, permitting the OTS to supervise mergers before institutions reach the RTC could retain more of the benefit from any franchise value that exists after the thrift has failed. To limit cost, this option could be varied to prohibit the OTS from committing government assistance in supervised mergers. Such a restriction could hinder the prospects for supervised mergers, but acquirers would be left with the distinct choice of buying the whole institution from the OTS in a clean merger or buying parts of the institution from the RTC.

Shift Responsibilities for Some Early Resolutions to the OTS. This option would allow the OTS to pursue its proposed Early Resolution/Assisted Merger program. This program, announced in late 1991, was intended to deal with troubled thrifts without having to resolve them. Under this program, a troubled thrift "voluntarily" requests OTS assistance in seeking a merger partner. The program is similar to the OTS Accelerated Resolution Program, the primary difference being that ARP candidates are considered market-value insolvent and thus will be closed by the OTS if a buyer cannot be found. ER/AM candidates are nearing market-value insolvency but are not yet candidates for OTS closure on the basis of solvency alone.

When introduced, the ER/AM program would not have involved any federal funding. In early 1992, however, the OTS announced that such early resolutions might require some federal financial assistance. The OTS argued that shareholders might object to the thrift's board of directors selling out the institution at an unfairly low price. To avoid the cost of litigation of shareholders suing the board of directors or the OTS, the OTS sug-

gested providing federal funds to buy out the shareholders. Providing federal funds would be controversial because it would raise the prospect that federal funding could be used to pay thrift shareholders rather than thrift depositors, as the law intends.

Even if federal financing were not required for the ER/AM program, some potential pitfalls would remain. The resulting merger of a healthy and a troubled thrift would probably reduce the capitalization of the surviving institution, as occurred many times with supervisory mergers conducted by the Federal Savings and Loan Insurance Corporation and the Federal Home Loan Bank Board.¹² The OTS claims that only healthy acquirers are permitted to merge with a troubled thrift and that the resulting institution must be sound in order for the merger to be approved. This claim can be verified only over time.

More Quickly Replace or Reprice the Liabilities of RTC Conservatorships. FIRREA provided the RTC with the authority to break existing contracts that failed thrifts had entered into. Using this authority, the RTC could reduce costs by repricing the liabilities of thrifts it controls in conservatorships. This action would amount to borrowing money at the government's lower interest rate and paying off creditors who deposited or lent funds to thrifts at high interest rates. The RTC has been reluctant to do this, in part because of the anticipated effect on financial markets. Initially, a shortage of working capital constrained the RTC's ability to replace high-priced insured deposits, but these constraints have been eased. Furthermore, RTC borrowing for working capital has not disrupted financial markets. There does not now appear to be any compelling argument for the RTC to borrow—either directly or indirectly—from

sources other than the lowest-cost, government-backed offerings.

Change the Way the RTC Disposes of Assets

Most analysts agree that the RTC must sell or dispose of assets more quickly. Thus far, the RTC has erred on the side of caution; it has proceeded slowly and deliberately. To improve its asset disposal program, the RTC could consider the following options: repackaging assets, changing bidding procedures, relying more on private-sector managers, eliminating RTC financing of asset sales, and scaling back or eliminating the securitization program.

Even if the RTC is able to dispose of most of a failed thrift through a P&A transaction or most of the failed thrift's liabilities through an IDT, the RTC retains a substantial amount of assets in receiverships. The RTC must account for the proceeds of these receiverships so that it can correctly distribute them among legal claimants against the failed thrifts. The collective assets of these receiverships, however, can be consolidated for bulk sales. Some information costs could be passed from the RTC to those who bid on these assets.

Repackage Assets: The Junkyard Proposal. The RTC has a huge inventory of assets to sell. It has preferred bulk sales in order to expedite disposition and to force some acquirers to take a mixture of good and bad assets. But inventorying and appraising the assets in its portfolio is a complex and costly process. If the RTC could transfer some of these information costs to acquirers, it could increase its return from asset sales.¹³

12. The Bank Board used supervisory mergers to avoid closing failed thrifts at a cost to the FSLIC. It attracted merger partners by allowing acquiring institutions to generously depreciate any goodwill created by the merger, which reduced the capitalization of the acquirer. Many of these supervisory mergers later became part of the FSLIC's or the RTC's caseload.

13. This principle, however, led to many questionable practices that were associated with FSLIC deals (see Appendix B). Many acquirers insisted on terms that were disadvantageous to the FSLIC. These terms included coverage of capital losses and yield maintenance agreements, in which the FSLIC promised to compensate the buyer if the return on the asset fell below a certain level within a given period following the sale. Although the FSLIC transferred information costs to acquirers, it retained much of the risk of having misvalued the assets.

The RTC could transfer information costs to acquirers through open auctions. The keys to success of such auctions are that the bidding is not exclusive, there are a large number of bidders, and parcels of assets are packaged so as not to preclude potential buyers. One criticism of the RTC is that some of its transactions are so large that they shut out many small potential bidders. The RTC could rely on a few large bidders to purchase assets that these acquirers will later sell to smaller buyers, but such intermediation of sales reduces returns to the RTC, making the RTC more like a wholesaler than a retailer. The lower prices obtained in wholesaling may be weighed against the higher retailing costs the RTC incurs in assuring open, competitive auctions of small parcels.

An alternative to bulk sales is the so-called junkyard proposal.¹⁴ This option for asset sales would structure the RTC like a vast junkyard. If the RTC could inventory and catalog its substantial asset holdings, it could open bidding for each small parcel to a wider market of buyers. Owners of junkyards do not typically hold large one-time auctions. Rather, they accept bids for items on a first-come, first-served basis. The junkyard owner has some expectation for junk prices, but might be willing to accept low initial prices to attract more buyers. Having many buyers assures competition for bidding on assets in the portfolio.

The junkyard proposal has the disadvantage that many good-quality assets will be sold first. The RTC might not realize as much on the sale of these assets as it would from waiting for more acquirers, because early shoppers would have less competition and be able to purchase assets at lower prices. The RTC could mitigate this problem by inventorying the junkyard to identify good assets and then attaching high reservation prices--the lowest price the seller will accept in an auction. The reservation price can be lowered

if generated sales fall below expectations. Using this strategy, the RTC would manage the trade-off between returns on assets and the size and scope of the market of bidders.

Another disadvantage is that the RTC must expend considerable effort inventorying assets and setting reservation prices. The RTC would also incur costs of marketing these assets. The RTC presumably would incur these efforts and costs anyway if it is efficiently retailing its assets. The fact that the RTC has been remiss in inventorying its assets dims the prospects for the junkyard proposal. If the RTC abandoned the policies of institutional sales and institution-by-institution resolution, it could devote more of its resources to this critical function.

A final disadvantage is that the junkyard proposal would result in profits for some speculative acquirers. This prospect, however, seems unavoidable regardless of the disposition process used.

Change the Bidding Process for RTC Assets. Regardless of the actual bidding process, the RTC would probably benefit from standardizing its techniques--either using the same process for all assets or using the same process for auctions of a particular type of asset. Standardization lowers uncertainty for bidders and increases the openness of bidding.

If the RTC prefers to sell assets on a retail rather than a wholesale basis, then it would open the bidding process to many bidders, both large and small. If the RTC prefers wholesale sales--sacrificing higher asset prices for faster transactions--then it would probably find that potential bidders are generally limited to specialized and experienced acquirers. The conditions FIRREA imposed on the RTC for asset disposition seem to favor retail sales. This means opening auctions to as many bidders as possible and reducing the size and scope of assets offered for sale.

Alternatively, wholesale sales of attractively packaged assets may be more profitable for the RTC because limited numbers of large

14. See Edward J. Kane, "Principal-Agent Problem in S&L Salvage," *Journal of Finance*, vol. 45, no. 3 (July 1991).

buyers might be more competitive. This apparent paradox is partly explained by the nature of information costs. If the RTC packages a number of similar assets in its inventory, it may be able to allow a potential buyer to specialize in that type of asset—especially securities, mortgage loans, and real estate holdings. The RTC is already doing this with assets such as hotels. By packaging like assets, the RTC can potentially receive higher bids from those acquirers specializing in holding or selling the types of packaged assets. Although this practice might exclude large numbers of small bidders, the RTC may realize higher prices on average.

A compromise policy would identify those types of assets that lend themselves to few large buyers and many small bidders. Further compromise to employ this policy on a case-by-case basis could be made, but having the RTC decide selling policy on a case-by-case basis would be costly. It might also exclude small buyers from an open bidding process.

It seems reasonable for the RTC to make clear its policies of the auctioning processes for different types of assets. Information on auctioned assets should be made available by the RTC unless the sale is on an "as-is" basis. To be effective the auction should be as open as possible, with all potential bidders given equal access.

The RTC may wish to raise the price until only one bidder remains, as in a traditional (English) auction, or it may wish to start with a very high price and lower prices until a bidder appears, as in a Dutch auction.¹⁵ This latter auctioning technique can be effective if the RTC has a definite reservation price in mind. If the offered or called price elicits no bids, the RTC can decide to withdraw the asset from sale until more bidders are found. The Dutch auction can also be used to obtain information on how reasonable RTC price expectations are without selling assets at highest bid prices.

Alternatively, the RTC could reject the highest bid in a traditional auction, but bidders might be discouraged from making future bids because bidding is a costly process for bidders as well as for sellers.

Rely on Private-Sector Management of Assets. Between August 1990 and November 1991, the RTC awarded 162 contracts to 112 private firms to manage and sell \$31.5 billion (book value) of assets.¹⁶ Most of these assets were delinquent loans and real estate. The RTC estimated that contractors will receive about \$548 million in fees for these services.

Expedient transfer of assets from the public sector to the private sector theoretically can benefit the RTC. Relying on private-sector resources to manage assets or the disposition process can lower the RTC's costs. As discussed in Chapter 5, however, there are some problems with the way the RTC uses private contractors. Compensation based on volume rather than profit is a disincentive for efficient management and sales.

But volume can be an effective basis for compensating private contractors for performing due diligence, inventorying assets, and settling legal claims. Even these contracts, however, must be monitored to make certain that they are cost-effective. Economies of specialization may accrue to the RTC as it becomes more experienced in handling these functions.

Profit is difficult to determine for the management and sale of assets. It is clear, however, that compensation for private contractors performing these functions should not be based purely on volume or the length of time that these assets are serviced. Private-sector asset managers would be rewarded for managing a greater amount of assets for a longer period of time. Private contracting for auctioning sales could inappropriately reward

15. For a discussion of different auction techniques, see, for example, Congressional Budget Office, *Auctioning Radio Spectrum Licenses* (March 1992).

16. See General Accounting Office, *Resolution Trust Corporation: Asset Pooling and Marketing Practices Add Millions to Contract Costs*, Report to Congressional Committees (October 1992).

contractors for accepting low prices to move more assets.

Projections of asset values could be used to define the RTC's expectations for private contractors. A technique that is commonly used in the private sector for managing commissioned sales is to offer incentives to contractors based on returns that meet or exceed expectations. Such projections are difficult to make because asset values are not really determined until the time of sale and because the value of many of the assets the RTC controls is so questionable. Information obtained from auctioning contracts for asset management and sales, however, enhances the experience of the RTC and assists it in appropriately formulating expectations. The RTC has more than three years of experience in managing and selling assets--both with its own sales and those that private contractors have managed for it. This experience should enable the RTC to set its goals and properly structure incentives for private-sector contracting.

Eliminate RTC Financing of Asset Sales.

The benefits of having the RTC finance its asset sales are debatable, and only a small portion of its sales has used this practice. Of the \$94 billion in assets the RTC sold between March 1991 and November 1992, only about \$2 billion of those assets were sold with RTC financing.

Although some benefits may be associated with this practice, it also carries risks. Such financing merely switches the asset held by the RTC-controlled institution for another asset--the loan to an acquirer to finance the sale of the original asset. Although RTC financing may attract more potential buyers to the market, it is not clear that the RTC should get into the business of lending. Financing sales may speed up recorded transfers of assets from the public to the private sector, but it is a risky activity.

The economy's sluggish recovery from a recession, however, provides a strong argument for the RTC to continue financing its asset sales. The slow recovery has made it difficult

for buyers to obtain private financing for real estate and other assets. Sales without financing could seriously reduce the price the RTC obtains for its assets. Given that the RTC can borrow from the Federal Financing Bank at minimal interest rates, it may be cost-effective at this time to continue financing asset sales. As general economic conditions and conditions for obtaining private funding improve, the RTC might phase out sales financing.

Even so, the RTC should be cautious about financing its sales. Because its cost to offer such financing is minimal, the RTC may be unduly benefiting some purchasers of its properties. As long as the RTC offers financed sales in an open and competitive environment, these benefits will be spread among various purchasers, although large purchasers could receive a relatively big share of this benefit. It is not clear that the benefits the federal budget garners from the higher prices the RTC obtains from selling its properties outweigh the cost of subsidizing borrowing. In light of current general economic conditions, however, both the RTC and the pool of potential purchasers may benefit from seller financing.

The risk that seller financing carries, of course, is that if the borrower defaults, the RTC must recover its collateralized property. This process adds further costs to selling the property again. One way to counter this risk would be for the Congress or the Oversight Board to prohibit the RTC from offering 100 percent financing and require the RTC to insist on a significant down payment as a term of the sale. The down payment creates an incentive for purchasers to pay off their loan.

Eliminate RTC Securitization. The RTC's loan securitization program may speed up asset disposal, but is it cost-effective? Because the RTC retains risk in the assets it securitizes, the process of securitization represents switching one RTC liability for another. As discussed in Chapter 5, the RTC pools a set of its assets and issues to investors securities that are backed by these assets. The RTC does not truly sell the asset; it sells a security collateralized by the asset. Many of the assets

securitized are pools of mortgages that are being repaid and will eventually be terminated. Under securitization of these pooled mortgages, the proceeds of interest and principal are paid to the holders of the securities.

Critics argue that the cost to the RTC of the securitization program is higher than if the RTC had terminated the mortgage itself and financed the holding by borrowing from the Federal Financing Bank (FFB). The RTC counters that securitization has enabled it to dispose of assets faster and at less cost.

A recent CBO analysis concludes that neither position is exactly correct.¹⁷ The RTC securitization program represents a compromise policy that better enables the RTC to achieve its mandated objectives. Securitization by the RTC produces a variety of financial instruments that to varying degrees have characteristics of both debt and equity. By retaining most of the credit risk of default on the securitized mortgages, the transaction falls far short of terminating the government's equity interest in the loans. By transferring some credit risk to investors, however, it cannot be classified as a pure debt transaction. The RTC retains an option to convert the transaction into a pure sale by liquidating its residual interest in the securitized pool of mortgages.

Viewed as a form of borrowing, securitization is more costly than borrowing from the FFB. But long-term borrowing from the FFB to hold the mortgages until they are fully repaid is inconsistent with the agency's mandate to dispose of assets. Viewed as a form of sale, the RTC securitization program is no more costly than alternative means of disposing of the assets, but neither is it less expensive than alternative methods, as the RTC contends. The cost savings that, according to the RTC, have come from using securitization depend on how accurately the RTC estimated the credit risk associated with the practice.

Securitization may be viewed as a temporary second-best solution to conflicting agency goals. Under this view, RTC securitization is appealing. Securitization moves the assets off the government's books. It also gives the RTC time to reestablish a track record for the performance of the assets it securitizes. Having such information would put the RTC in a better position to conduct a complete sale later because it would minimize market uncertainty about the true value of the assets. The RTC plans to liquidate its interest in the reserve funds it creates to support the securitization.

Improve RTC Management

To say that the administrative structure of the RTC created by FIRREA was cumbersome is an understatement. RTCRRIA streamlined some of this structure by making the RTC a temporary, independent, executive branch agency: the FDIC board of directors no longer manages the RTC. The Thrift Depositor Protection Oversight Board is still responsible for general RTC policies, but administration of the RTC is independent of other agencies.

Management of the RTC has been the subject of substantial criticism. The General Accounting Office has been critical of the management systems the RTC uses to administer its various functions. GAO reported that it still cannot determine the financial position of the RTC through December 31, 1990, because of "internal control weaknesses in the [RTC's] receivership operations, flaws in its methodology for estimating recoveries from the sale of receivership assets, and its significant exposure to losses from real estate and delinquent real estate backed loans for both resolved and unresolved institutions that existed in 1990."¹⁸ GAO, however, assessed the RTC's financial position for 1991 and reported that some management problems had been ad-

17. See Congressional Budget Office, "The RTC's Loan Securitization Process," CBO Staff Memorandum (July 1992).

18. See General Accounting Office, *Financial Audit: Resolution Trust Corporation's 1990 and 1991 Financial Statements*, Report to the Congress (June 1992), pp. 6-7.

dressed, but that others continued to plague the RTC.

Improve RTC Oversight of Contracting Operations. GAO has been critical of the RTC's oversight of its contracting systems.¹⁹ Although GAO acknowledged improvements in those systems, it considers oversight of contracts to be weak. Specifically, GAO concluded that the RTC lacks systems to assure that contracting officers appropriately monitor contract operations and that the RTC is obtaining the contract services it is paying for.

Since that report, the RTC has improved its contracting system. It has issued a manual to provide uniform guidance on contracting policies and procedures. It restructured its management of contracting functions. The RTC also developed standard documents for soliciting bids to assure that all Standard Asset Management and Disposition Agreement contractors were given uniform information on pending contracts.

According to GAO, however, the RTC could improve its contracting system further. Organizational changes in management that were initiated require completion. The RTC needs uniform procedures for evaluating the financial and technical capabilities of its potential contractors. Furthermore, the RTC needs to improve the training of its contracting personnel.

Such improvements may not yield huge cost savings relative to the overall cost of the thrift cleanup. The RTC's philosophy of placing high reliance on outside contractors, however, seems to warrant continued attention to this critical area.

Improve the RTC's Management Information Systems. Most of the options discussed above for changing the RTC's resolution and asset disposition process require better information systems. Even though the RTC will

incur some large costs for setting up such systems, returns on an investment in this critical area appear to be justified. The expenditures, moreover, are a very small portion of the overall cost of the cleanup.

GAO has not been satisfied with the RTC's efforts to develop a management information system. The RTC still does not have adequate systems in place to support fully its function of managing and selling assets.²⁰ The RTC has set up the Asset Manager System to monitor SAMDA contracts, the Real Estate Owned Management System to keep track of unsold real estate controlled by the RTC, and the Loans and Other Asset Inventory System to track inventory. But none of these corporate-wide systems, in GAO's opinion, provides the benefits intended. Problems include unclear or changing requirements, inaccurate and incomplete data, poor response times, and computer systems that are not easily used by computer operators.

The RTC needs to have timely information on the quantity of its assets. Knowing the types of assets held and where they are located would enable the RTC to tailor its marketing strategies to attract large and small buyers, national and regional buyers, and buyers who can acquire assets that qualify as affordable housing.

An improved inventory system need not involve a full valuation of assets, but it could facilitate classification of types of assets. The RTC, therefore, could group assets for which it wishes to let the auction set a value. Doing so would lower information costs to the RTC by transferring them to buyers. Not all assets would be appropriately marketed this way, but many of dubious value could be disposed of at lower cost.

The RTC has been highly criticized for not making clear what is available for sale. Some critics have argued that only large potential buyers can obtain sufficient information to

19. Statement of Charles A. Bowsher, Comptroller General of the United States, before the Senate Committee on Banking, Housing, and Urban Affairs, March 5, 1992.

20. Ibid.

offer appropriate bids, which excludes other buyers from the RTC market and lowers bids. Adequate inventorying of assets would facilitate the cataloging of items for sale, which would attract more potential bidder and potentially give the RTC higher prices.

Conclusion

The RTC is an enormous government agency charged with a Herculean task. Under the circumstances, it has achieved reasonable progress, but it has been slow and often inefficient. Some administrative changes could increase efficiency, but the RTC--and taxpayers--would probably benefit most from options that suggest strategic changes. Switching from resolving institutions one at a time to repackaging them offers possible cost savings on individual institutions or properties, although the net benefits of carrying out this option are not certain. In addition, it may be less costly for the RTC to liquidate institutions and repackage their assets and liabilities

for disposition than to seek acquirers that may not exist. With the possible exception of some institutions that have obvious franchise value and whose merger could be arranged by the OTS, forcing the RTC to liquidate rather than sell institutions could help the RTC to speed up resolutions and lower its costs.

Even if these strategic changes are not adopted, the other changes discussed above could improve the efficiency of the RTC. The RTC could change its policies of asset disposition. Repackaging assets or conducting a junkyard sale offer potential benefits, but would require changes in RTC operations. In addition, the RTC could improve its private contracting for asset management and disposition so that private contractors have the correct incentives to obtain the highest returns on sales of RTC assets.

The RTC's term has already been extended to September 30, 1993. According to CBO projections, its term could be extended until October 1998 before it runs out of thrifts to resolve. Thus, the benefits of changing operating practices could still be realized.

Appendixes

Players in the Thrift Cleanup

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) created a structure for overseeing and financing the cleanup of the thrift industry. It assigned new responsibilities to existing agencies, abolished some agencies, and created others. The Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 (RTCRRIA) further changed this structure. Several other agencies such as the Congressional Budget Office, the General Accounting Office, and the Office of Management and Budget play a role in the cleanup by providing the Congress and the President with analyses of the performance of the operational agencies and with budget projections for financing the task.

Department of the Treasury

Established as an executive department by the first session of Congress in 1789, the Department of the Treasury manages the monetary resources of the United States. During the Civil War, the Office of the Comptroller of the Currency was created as an agency of the Treasury Department to charter and regulate national banks.

FIRREA created the Office of Thrift Supervision, one of the agencies that succeeded the Federal Home Loan Bank Board, to charter

and regulate institutions insured by the Savings Association Insurance Fund. With these two agencies under its control, the Department of the Treasury is responsible for regulating the banks and thrifts that hold the majority of assets at U.S. depository institutions. The Secretary of the Treasury, who is a member of the President's cabinet, serves as chairman of the Oversight Board

Federal Asset Disposition Agency (FADA)

The Federal Home Loan Bank Board established this agency in 1985 to manage and dispose of large amounts of assets. Administered by the Bank Board, the FADA was a private entity that could pay private-sector salaries and avoid the limitations imposed on federal personnel. Theoretically, the FADA could carry out government functions and attract specialized skills that required private-sector salaries. The Bank Board never clarified the FADA's specific mission; nor did it make clear what the FADA's exact relationship was to the liquidation division of the Federal Savings and Loan Insurance Corporation. Although some analysts contend that the FADA eventually became an effective manager and disposer of assets, the agency was highly controversial and the subject of intense Congressional criticism. FIRREA instructed the Federal Deposit Insurance Corporation to liquidate the FADA, which it did in 1990.

Federal Deposit Insurance Corporation (FDIC)

Made permanent by the Banking Act of 1935, the FDIC had operated as a temporary deposit insurance fund since the beginning of 1934. Originally, the FDIC operated a single deposit insurance fund that protected deposits at commercial banks that were nationally chartered, members of the Federal Reserve System, or state-chartered banks that chose to participate. The FDIC now also provides deposit insurance coverage to mutual savings banks. Although it shares responsibility for regulating FDIC-insured banks with the Office of the Comptroller of the Currency (the primary federal regulator of national banks), the Federal Reserve (the primary federal regulator of state-chartered commercial banks that are members of the Federal Reserve System), and state bank regulatory agencies, the FDIC is the primary federal regulator responsible for examination and supervision of state-chartered banks that are not members of the Federal Reserve System and of mutual savings banks.

In early 1989, President Bush ordered the FDIC to temporarily take over responsibility from the beleaguered Federal Home Loan Bank Board and the depleted Federal Savings and Loan Insurance Corporation (FSLIC) for managing government-seized thrifts. The FDIC operated thrifts placed in its control by the Bank Board in conservatorships until FIRREA created the Resolution Trust Corporation (RTC) to administer conservatorships and manage resolutions. FIRREA restructured the FDIC so that it would also separately operate the newly established Savings Association Insurance Fund, which insures deposits at thrifts that were insured by the FSLIC. (The original deposit insurance fund the FDIC operated for banks was named the Bank Insurance Fund by FIRREA.) The FDIC also administers the FSLIC Resolution Fund. Before RTCRRIA, the FDIC's board of direc-

tors also served as the RTC's board of directors, and the chairman of the FDIC was also the chairman of the Resolution Trust Corporation.

Federal Financing Bank (FFB)

Operated by the Department of the Treasury, the FFB was created to ensure the coordination of federal and federally assisted borrowings from the public and to ensure that such borrowings are financed in a manner least disruptive to private financial markets and institutions. The FFB has been the vehicle through which most federal agencies finance their programs involving the sale or placement of credit instruments.

Transactions by the FFB on behalf of a federal agency are treated as means of financing the agency--that is, lending by the FFB to the agency and borrowing by the agency from the FFB. These transactions are not reflected directly in the government budget totals because borrowing and the repayment of borrowing between federal agencies and the Treasury are not budgetary transactions. Rather, the budget authority and the outlays of the agency that are financed by such borrowing are reflected in particular agency accounts and, hence, in the budget totals. The Resolution Trust Corporation borrows working capital from the FFB and repays the interest and principal with the proceeds of asset disposition.

Federal Home Loan Bank Board

Established by the Federal Home Loan Bank Act of 1932, the Bank Board was created to oversee the 12 Federal Home Loan Banks that constitute the Federal Home Loan Bank Sys-

tem. The primary purpose of this legislation was to rescue the savings and home-financing industry that failed during the Great Depression. The legislation authorized the Federal Home Loan Banks to lend to thrifts that were members of the system. The Bank Board, comprising three members appointed by the President with the advice and consent of the U.S. Senate, had the dual tasks of promoting the housing finance system and regulating the thrifts that were the primary purveyors of housing finance. Deposit insurance for thrift institutions was provided through the Federal Savings and Loan Insurance Corporation, which operated under the aegis of the Bank Board.

The Bank Board was responsible for the inappropriate and inadequate regulatory reaction to the massive thrift failures that constituted the thrift crisis. Recognized losses at failed thrift institutions depleted the FSLIC in 1987. FIRREA abolished the Bank Board and replaced it with the Office of Thrift Supervision (to regulate thrifts) and the Federal Housing Finance Board (to supervise the Federal Home Loan Banks and promulgate housing finance policies). FIRREA also abolished the FSLIC, replacing it with the Savings Association Insurance Fund, which is administered by the Federal Deposit Insurance Corporation.

Federal Home Loan Banks

The 12 Federal Home Loan Banks, supervised by the Federal Housing Finance Board since FIRREA, make up the Federal Home Loan Bank System. Originally created by the Federal Home Loan Bank Act of 1932, the Federal Home Loan Banks are authorized to lend money to thrifts on a secured basis. Using mortgages as collateral, thrifts and other members may borrow Federal Home Loan Bank advances at below-market interest rates. Low-rate Federal Home Loan Bank advances en-

couraged thrifts to offer more long-term, fixed-rate mortgages than market conditions would have permitted otherwise.

FIRREA created the qualified thrift lender (QTL) test to establish requirements for access to Federal Home Loan Bank advances. Currently, a member institution must have 65 percent of its loans in qualifying investments to be eligible. Federal Home Loan Banks are owned by their members, which include some insurance companies. The boards of directors of the district banks comprise individuals elected by member institutions subject to the approval of the Federal Housing Finance Board.

Federal Housing Finance Board (FHFB)

Established by FIRREA, the FHFB succeeded the Federal Home Loan Bank Board in its role as administrator of the Federal Home Loan Bank System. The FHFB is an independent executive branch agency that regulates the Federal Home Loan Banks in their conduct of policies that foster housing finance. The FHFB promulgates policies for affordable housing that make use of Federal Home Loan Bank funds designated by FIRREA to support these policies.

Federal Reserve System

The Federal Reserve was established in 1913 and comprises 12 district Federal Reserve Banks that are governed by the seven-member Board of Governors. Member banks of the Federal Reserve System, which include nationally chartered banks and some state-chartered banks, own the Federal Reserve Banks, but control of the Federal Reserve rests with the Board of Governors, whose members are appointed by the President with the advice and consent of the U.S. Senate.

The Federal Reserve is responsible for the monetary and credit policies of the United States. It is the primary federal regulator that supervises and examines member banks and bank holding companies. In addition to providing liquidity to the banking system, the Federal Reserve also operates the primary systems for check clearing and wire transfers. FIRREA named the chairman of the Board of Governors as a member of the Resolution Trust Corporation Oversight Board.

Federal Savings and Loan Insurance Corporation (FSLIC)

Created by the National Housing Act of 1934, the FSLIC was the deposit insurance fund for thrifts that operated under the aegis of the Federal Home Loan Bank Board. As a result of the unprecedented number of thrift failures in the 1980s, the FSLIC depleted its cash resources by 1987 and was forced to delay takeovers and use questionable practices in resolving the thrifts that it did close (see Appendix B). Although the Competitive Equality Banking Act of 1987 provided temporary funding, the FSLIC was unable to resolve all of the insolvent thrifts it faced. FIRREA abolished the FSLIC in 1989. Its receiverships were transferred to the FSLIC Resolution Fund, and a new deposit insurance fund, the Savings Association Insurance Fund, was set up. Both funds were administered by the Federal Deposit Insurance Corporation.

Financing Corporation (FICO)

Created by the Competitive Equality Banking Act of 1987, FICO was chartered by the Feder-

al Home Loan Bank Board to borrow \$10,825 million for the depleted Federal Savings and Loan Insurance Corporation. FICO provided funding to the FSLIC in exchange for non-voting capital stock and capital certificates. FICO was capitalized with the retained earnings of the Federal Home Loan Banks; its earnings on this capitalization, which came from investments in deep-discount government bonds, were used to repay the principal of its bonds. Special insurance premiums assessed on thrifts insured by the FSLIC were diverted to pay the interest on FICO bonds. The Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 terminated FICO's borrowing authority.

FSLIC Resolution Fund

Created by FIRREA, the FSLIC Resolution Fund is administered by the Federal Deposit Insurance Corporation. This fund is responsible for completing the resolution of receiverships created by the Federal Home Loan Bank Board and the Federal Savings and Loan Insurance Corporation. In 1997, the Resolution Trust Corporation is scheduled to transfer its remaining receiverships to the fund, which will be responsible for completing them.

Office of Thrift Supervision (OTS)

Created by FIRREA, the OTS replaced the Federal Home Loan Bank Board in its function as regulator of savings and loans and savings banks insured by the Savings Association Insurance Fund. In this capacity it charters new thrifts, sets capital standards and other operating guidelines, and is responsible for the prudential supervision and examination of institutions insured by the SAIF.

Operating as an agency of the Department of the Treasury, the OTS is headed by a director who is appointed by the President with the advice and consent of the U.S. Senate. The director serves on the board of directors of the Federal Deposit Insurance Corporation and, since RTCRRIA, on the Thrift Depositor Protection Oversight Board. The OTS consolidated the field offices of the thrift regulatory function from the 12 Federal Home Loan Banks to five regional offices. It is responsible for transferring failed thrift institutions to the control of the Resolution Trust Corporation. In 1991, the OTS established the Accelerated Resolution Program in which the OTS resolves a thrift without passing it on to the RTC. Funding for these resolutions still comes from the RTC, but the OTS administers the resolutions.

Oversight Board

FIRREA created the Resolution Trust Corporation Oversight Board to oversee the strategic operations of the RTC. Its five-member board comprised the Secretary of the Treasury, who served as chairman; the chairman of the Federal Reserve; the Secretary of Housing and Urban Development; and two other members appointed by the President with the advice and consent of the U.S. Senate. Strategic oversight of the RTC was the subject of substantial criticism because the RTC was also administered by the board of directors of the Federal Deposit Insurance Corporation. Most analysts agree that having, in effect, two boards of directors created difficulties for the RTC's planning.

RTCRRIA restructured the Oversight Board, which is now named the Thrift Depositor Protection Oversight Board, and expanded the board from five to seven members. The Secretary of the Treasury is still the chairman, and the chairman of the Federal Reserve is still a member. The Secretary of Housing and Urban Development was removed from the board, and the director of the OTS and the

chairman of the FDIC were added. The newly created position of chief executive officer of the RTC was also added to the Oversight Board. Other members are appointed by the President with the advice and consent of the U.S. Senate. The streamlining of RTC oversight effected by RTCRRIA is expected to improve the RTC's strategic planning.

Resolution Funding Corporation (REFCORP)

FIRREA established REFCORP to finance the Resolution Trust Corporation. It is a mixed-ownership government corporation that is subject to the oversight and direction of the Oversight Board. The day-to-day operations of REFCORP are under the management of a three-member directorate comprising the director of the Office of Finance of the Federal Home Loan Banks and two members selected by the Oversight Board from among the presidents of the Federal Home Loan Banks. Members of the directorate serve without compensation, and REFCORP is not permitted to have any paid employees. Of the original \$50 billion appropriated for the RTC, \$30 billion came from the periodic sale of private debt by REFCORP. Some of the interest and all of the principal of this debt is repaid by assessments on thrifts and retained earnings of the Federal Home Loan Banks, but most of the interest is paid by the Department of the Treasury.

Resolution Trust Corporation (RTC)

The RTC was established by FIRREA to take over from the old thrift regulatory structure the task of resolving institutions that had failed during the thrift crisis. Staffed with more than 7,000 employees, most of whom came from the Federal Home Loan Bank Board and the Federal Savings and Loan In-

insurance Corporation, the RTC, upon establishment, became the largest financial institution in the world.

Under FIRREA's schedule, the RTC would have ceased taking failed thrifts from the Office of Thrift Supervision in August 1992. These thrifts are operated in RTC-controlled conservatorships until resolution is effected. Upon resolution, receiverships are created to resolve all financial and legal claims until terminated by the courts. In 1997, the RTC is scheduled to transfer to the FSLIC Resolution Fund its remaining receiverships.

FIRREA did not appropriate sufficient funds for the massive number of failed thrifts that the RTC had to deal with. Although the Resolution Trust Corporation Funding Act of 1991 provided additional funding of \$30 billion, it became apparent in 1991 that the RTC would need even more funding and that its scheduled termination should be extended. RTCRRIA provided an additional \$25 billion to be used for resolutions completed by March 31, 1992. The RTC, however, was able to commit only \$6.7 billion of this appropriation by the deadline. Although no further funding has been appropriated, the RTC has been able to resolve a few failed thrifts by drawing on a minimal amount of cash that remained in its allocation for loss money.

RTCRRIA also extended the RTC's deadline for taking over failed thrifts to the end of September 1993. At that time, the Savings Association Insurance Fund, which the Federal Deposit Insurance Corporation administers, will assume responsibility for resolving failed thrifts. RTCRRIA also changed the management structure of the RTC. Its employees

were designated FDIC employees assigned to the RTC. The act created the position of chief executive officer to replace the administrative authority exercised by the FDIC's board of directors (the chairman of the FDIC had been the chairman of the RTC). The Oversight Board helps the RTC with its strategic planning.

Savings Association Insurance Fund (SAIF)

Created by FIRREA, the SAIF replaced the Federal Savings and Loan Insurance Corporation and was placed under the administration of the Federal Deposit Insurance Corporation. The FDIC operates the SAIF as an independent deposit insurance fund for federally and state-chartered savings and loans and stock-held savings banks.

Beginning in 1993, all insured thrifts pay assessment premiums to the SAIF, net of contributions to the Financing Corporation. Certain banks that have acquired failed thrifts (commonly known as Oaker thrifts) pay to the SAIF a portion of their assessment that is equal to the ratio of thrift deposits to bank deposits at the time of acquisition. The deposit insurance premiums collected by the SAIF, net of contributions to FICO, are used to pay its nominal administrative expenses and the cost of any failures of Oaker thrifts. When the SAIF takes over the resolution of failed thrifts from the Resolution Trust Corporation in 1993, it will use premium income to pay for new thrift failures.

How the FSLIC Resolved Failed Thrifts

From 1980 through 1988, the Federal Home Loan Bank Board and the Federal Savings and Loan Insurance Corporation performed 333 supervisory mergers and resolved 489 failed thrifts. Of the 489 thrift resolutions, only 77 were liquidations and most of them were insured deposit transfers. The 489 thrift resolutions were estimated in 1989 to have a total present-value cost of about \$42 billion. Subsequent reestimates suggest that the true costs of these resolutions, on a comparable present-value basis, are between \$2 billion and \$4 billion higher.¹

To assess the current resolution process, it is instructive to know how the Federal Home Loan Bank Board and the FSLIC handled the resolution of failed thrifts.² The mechanics of resolution were basically continued by the Resolution Trust Corporation with some ex-

ceptions. For instance, the Bank Board and the FSLIC did not rely on a conservatorship process to control institutions before resolution.

Certain techniques the Bank Board and the FSLIC used to resolve institutions were controversial, and many were questionable. Faced with a shortage of cash, the FSLIC offered many noncash incentives to acquirers who would buy most or all of the failed institution, thus enabling the FSLIC to avoid resorting to liquidation. The most questionable practice was offering acquirers certain tax benefits that resulted from losses at the failed thrift. The "sale" of these tax benefits lowered the FSLIC's costs, but reduced receipts to the federal budget. The government's costs of FSLIC resolutions, therefore, were not lowered by these incentives to purchase; they were merely redistributed to other portions of the federal budget.

1. This reestimation is based on a GAO review of FSLIC resolutions in 1988 (see General Accounting Office, *Thrift Resolutions: Estimated Costs of FSLIC's 1988 and 1989 Assistance Agreements Subject to Change* (September 1990)). That study concluded that the cash outlays of the FSLIC Resolution Fund, which had taken over FSLIC receiverships, would be \$60 billion rather than the \$40 billion reported previously. Some of the thrift resolutions GAO included in the study were actually "stabilizations." In 1988, the Bank Board and the FSLIC were unable to conclude the resolution of 18 failed thrifts. The Bank Board referred to these incomplete resolutions as stabilizations, but the term is unofficial. These stabilizations had assets of about \$7.5 billion and were estimated in 1988 to have a present-value cost of resolution of \$6.8 billion. Some of the difference between GAO's reestimate of \$60 billion and the original estimate of \$40 billion was the cost of these stabilizations. The Resolution Trust Corporation later resolved the stabilizations, but for the most part they were paid for by the FSLIC Resolution Fund. The remainder of the difference is reported on a cash outlay basis. If, in 1988, the FSLIC had used GAO's 1990 revised cash numbers to estimate the present-value cost of thrifts resolved in 1988, it would have been \$2 billion to \$4 billion higher than the FSLIC reported.

The Bank Board and FSLIC Resolution Process

To start the resolution process, the Bank Board would declare that a thrift had failed

2. See, for example, James R. Barth, Philip F. Bartholomew, and Peter J. Elmer, "The Cost of Liquidating Versus Selling Failed Thrift Institutions," Research Paper No. 89-02 (Office of the Chief Economist, Office of Thrift Supervision, November 1989); Roger C. Kormendi and others, *Crisis Resolution in the Thrift Industry* (Boston: Kluwer Academic Publishers, 1989); and Lawrence J. White, *The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulation* (New York: Oxford University Press, Inc., 1991).

and would place it into FSLIC receivership.³ Failure was defined as book-value insolvency.⁴ A thrift was insolvent if the value of its liabilities exceeded the value of its assets. The valuation was made on the basis of accounting standards used by the regulator. Section 406(f) of the National Housing Act of 1934 empowered the FSLIC to use the method that was least expensive for the insurance fund to carry out its primary obligation of guaranteeing covered deposits.

There were alternatives, however, to simply closing a failed thrift and liquidating its assets and liabilities. The National Housing Act authorized the FSLIC either to acquire the assets and liabilities of a troubled thrift or to provide loans or contributions, as long as the estimated cost of doing so was lower than simply liquidating the institution.

Supervisory-Assisted Mergers

With the authority provided by the National Housing Act of 1934, the Bank Board arranged for some troubled thrifts to be acquired by other, healthy thrifts without cost to the FSLIC's insurance fund. (The administrative costs the Bank Board or the FSLIC incurred were not considered to be a contribution to the thrift and were not counted as a cost of resolution.) From 1980 through 1988, the Bank Board arranged 333 of these so-called supervisory-assisted mergers, most of which were done in 1982.⁵

Many of the acquirers in these mergers later failed because their capitalization was weakened when they combined their assets

and liabilities with those of the troubled thrift.⁶ The extent of their undercapitalization was not fully recognized because the Bank Board granted them forbearance on their capital standards. When the troubled institution was acquired, its assets were revalued on a market-value basis (that is, they were marked to market), and many of its losses were realized on the books. Acquirers still paid more than the market value of the assets because they felt that the troubled thrift had intangible value as an ongoing concern. This so-called franchise value is not normally recorded on the books, but its value does appear in mergers.

Under generally accepted accounting principles (GAAP), if an acquirer pays more than the book value of the acquired institution's net worth, then it must show the difference as goodwill. GAAP treats goodwill as a depreciating intangible asset. The Bank Board granted a forbearance on capital standards to acquiring thrifts by allowing them to write off, or depreciate, goodwill at a more generous rate than GAAP would allow. The goodwill created in these supervisory mergers is called supervisory goodwill, but it is not distinguished as such in financial reports.

It is difficult to determine exactly how much supervisory goodwill was created in these supervisory mergers. Likewise, it is difficult to determine the share of supervisory goodwill in the approximately \$7 billion in intangible assets on the books of the thrift industry at the

3. Because many of the thrifts the FSLIC insured were state-chartered, the order for takeover came from the state chartering authority. Although the states could declare another receiver, arrangements among the Bank Board, the FSLIC, and state thrift regulators generally named the FSLIC as receiver and made the Bank Board and the FSLIC responsible for resolution.

4. There were other grounds for the Bank Board to declare that a thrift had failed, but they were never used. See Congressional Budget Office, *Reforming Federal Deposit Insurance* (September 1990).

5. The term "assisted" refers only to the government's help in arranging the merger. The annual number of supervisory-assisted mergers is shown in Table C-2.

6. A thrift with \$100 billion in assets and \$90 billion in liabilities has \$10 billion in net worth (that is, capital). Its capitalization, which is measured by the ratio of capital to assets, is 10 percent. If it purchases a thrift with the same amount of assets but \$99 billion in liabilities, giving it \$1 billion in capital and a 1 percent capitalization ratio, then the resulting institution from the merger has \$200 billion in assets, \$109 in liabilities, and \$11 billion in capital. Although the total amount of capital at the two institutions and their joint capitalization remain the same, the resulting institution is less well capitalized, at 5.5 percent, than it was before the merger. The reduction in the capitalization of acquiring institutions depended on their size relative to that of the troubled thrift and the relative capitalization of both thrifts.

end of 1992. One way to estimate supervisory goodwill is to look at year-end financial data of the thrift industry between 1981 and 1982. At the end of 1981, the industry had a GAAP measure of capital of \$27 billion. Tangible capital was reported as \$25 billion; total goodwill at that time thus amounted to about \$2 billion. At the end of 1982, the industry reported a GAAP measure of capital of \$20 billion and a tangible measure of capital of \$4 billion, which implies that at least \$16 billion of goodwill was created in 1982. Because 1982 had the highest number of supervisory mergers, it is reasonable to conclude that much of the \$16 billion of goodwill was supervisory goodwill. In that year, 184 supervisory-assisted mergers were arranged (see Table C-2); about 200 regular mergers also took place.

Open-Thrift Assistance

The Bank Board and the FSLIC also used their authority to extend loans or make contributions to troubled thrifts. This so-called open-thrift assistance was made in the belief that the troubled thrift could recover with temporary financing or minimal assistance. Outlays for contributions associated with open-thrift assistance are difficult to discern, however, because all of these thrifts were eventually resolved and the cost of resolution did not distinguish these contributions from other costs.

The Management Consignment Program and the Southwest Plan

In early 1985, the Bank Board initiated the Management Consignment Program (MCP). This program was developed for insolvent thrifts whose managers were considered unlikely to comply with supervisory actions. From 1985 through 1988, more than 100 insolvent thrifts were brought into the MCP. The program's objective was to install a new set of managers to operate the institution in such a way as to reduce the FSLIC's ultimate costs.

Installing new management could involve appointing a conservator, placing the institution into receivership, or creating a new, federally chartered, mutually owned thrift that incorporated the insured liabilities and assets of the old institution that were not potentially harmful to the new institution.⁷

The MCP was a predecessor of the RTC's conservatorship program, but outside managers--usually from other thrifts in the state or region--were contracted to run the institutions. The original idea was that a thrift would be in the MCP for only 90 days. The first thrift that entered the MCP was resolved three and a half years later. Managers of thrifts in the MCP could only stem losses from new investments; that they could rid the thrift of its embedded bad assets and restore the thrift to solvency would have been an unreasonable expectation. Managers were faced with substantial ongoing operating losses. These losses resulted in part because depositors, uncertain of the FSLIC's ability to make good on its deposit insurance commitment, asked for higher interest rates than they would have received from solvent thrifts.

The Southwest Plan, announced by the Bank Board in January 1988, introduced the concept of combining several insolvent thrifts into a single institution. It was established in part to address the higher cost of funds that insolvent, unresolved thrifts were paying. Insolvent thrifts in Texas, for example, paid on average approximately 75 basis points, or three-quarters of one percentage point, more for deposits than the national average.⁸ The Bank Board hoped that the Southwest Plan could obtain some savings by reducing overhead costs and that these repackaged thrifts might be better prospects for purchase and assumptions than they would be as separate institutions. By the end of 1988, the Bank Board had

7. See Kormendi and others, *Crisis Resolution in the Thrift Industry*, p. 23; and White, *The S&L Debacle*, pp. 134-136.

8. This so-called "Texas premium" is measured based on certificates of deposit of like maturities. See White, *The S&L Debacle*.

resolved 83 failed thrifts that had been combined in 16 Southwest Plan institutions.

It is unclear whether the Southwest Plan was successful, but analysis of the 1988 resolutions suggests that the costs of resolving the thrifts in that plan were not significantly higher than those of other resolutions.⁹ The Southwest Plan generally is not viewed favorably by analysts, probably because it was merely another tactic for delaying resolution.

Purchase and Assumption and Liquidation

Once the Bank Board determined that a failed thrift would be closed, there were still a number of ways to resolve it. As discussed in Chapter 4, the FSLIC preferred to sell the whole institution in a purchase and assumption (P&A) rather than liquidate it in receivership. The theoretical preference for a P&A rests with the notion that a thrift has some value as an ongoing concern. This value is not reflected on the books of the thrift; it rests with the quality of the thrift's management, the quality and extent of its customer relationships, and other aspects of its business. The FSLIC also realized that some nonthrift acquirers valued the thrift charter because it afforded them the ability to enter the thrift business. Acquiring an established thrift, albeit of poor quality, could be less expensive than starting one from scratch. Acquiring an established thrift from the FSLIC, which was being forced to dispose of it and was trying to avoid its liquidation, could be arranged more cheaply than acquiring a healthy thrift.

Deals arranged by the FSLIC to resolve a failed thrift through purchase and assumption have been the subject of extensive criticism. The FSLIC had a shortage of cash--both for loss money and working capital. Liquidations were not only more expensive than P&As, but

they also required more working capital. By law the FSLIC was required to minimize losses to the insurance fund when it resolved failed thrifts. Since P&As were effected with lower loss rates relative to assets than liquidations, the Bank Board presumed that P&As were preferred.

There are two problems with this presumption. First, not all institutions can be resolved more cheaply through a P&A than through liquidation. Only those institutions with assets whose book value is below their market value or, as is more likely the case, have some franchise value are good candidates for a P&A. Second, there is a cost for seeking a P&A acquirer. The FSLIC did not bear any direct carrying costs for managing assets and liabilities at failed institutions because they were not closed until resolution. It did bear indirect carrying costs because failed thrifts continued to lose money either from further bad investment decisions or from high operating costs.¹⁰ It was also possible that the longer a failed thrift waited for resolution, the more its franchise value diminished; substantial unresolved financial difficulties at a thrift can prompt good managers and staff to leave and uncertain core depositors, even though insured, to withdraw funds.

Faced with a shortage of cash and assuming that P&As were a cheaper general resolution strategy, the FSLIC gave too much emphasis to preferring P&As over liquidations. The deals negotiated in arranging P&As probably were less favorable to the FSLIC than if it had not had a cash shortage and had not been as desperate to avoid liquidations. Since potential acquirers perceived that liquidation was not a realistic alternative for the FSLIC, their

9. See, for example, Barth, Bartholomew, and Elmer, "The Cost of Liquidating Versus Selling Failed Thrift Institutions."

10. As mentioned earlier, failed thrifts that were not resolved tended to pay higher rates on deposits. See, for example, James R. Barth, Philip F. Bartholomew, and Carol J. Labich, "Moral Hazard and the Thrift Crisis: An Empirical Analysis," *Consumer Finance Law: Quarterly Report*, vol. 44, no. 1 (Winter 1990); and White, *The S&L Debacle*. They may have paid higher rates because depositors were uncertain about the FSLIC's ability to meet its deposit insurance obligations or because failed thrifts resorted to high-priced borrowings to meet liquidity needs.

bargaining power was strengthened. The FSLIC was successful in attracting bidders, but the deals are difficult to analyze because the negotiation process was highly complicated and the bidding process was iterative.¹¹ Moreover, some deals involved a first round of bidding to grant exclusive negotiation rights. By granting exclusive negotiation rights, the FSLIC increased the bargaining power of acquirers who may have overpriced their initial bid in order to eliminate the competition.

Noncash Incentives in FSLIC Deals

Rather than being simple agreements as to how much the FSLIC would pay to have an acquirer purchase and assume the thrift, the deals included other factors that are difficult to value. The FSLIC offered noncash incentives to acquirers of failed thrifts, including coverage of capital losses, yield maintenance agreements, and tax benefits.¹² Loss coverage and yield maintenance agreements were offered because both the FSLIC and the acquirer were uncertain about the true value of assets included in the deal. Tax benefits were offered as a price discount to the acquirer at no cost to the FSLIC, even though they were recorded as a cost to the Treasury.

Certain assets were sold in a P&A with a provision for coverage of capital losses. If the acquirer sold those assets at a price lower than was stipulated in the deal with the FSLIC, the FSLIC agreed to make up the difference. In some deals with this provision, the FSLIC negotiated a loss-sharing arrangement to minimize its exposure to future loss.

Some assets that were currently yielding little or no income were sold in the P&A with a yield maintenance agreement--a guarantee to the buyers that loans acquired in the P&A would earn some minimal amount and that the FSLIC would make up any difference. Because the FSLIC therefore shared in potential unanticipated losses, this arrangement reduced the acquirer's incentive to maintain the quality of the loan. The FSLIC also tried to ensure that it did not undersell the thrift and included in the deals provisions for it to share in any unanticipated gains. It issued warrants that enabled it to purchase stock at a prearranged price in the event that the acquirer did better with the thrift than the negotiated deal anticipated.

The FSLIC used call provisions on capital loss coverage and yield maintenance agreements. If, in the future, the FSLIC were to have greater financial resources or feel that it could dispose of assets better than the acquirer, it could call the asset and reacquire it.

The FSLIC also used certain tax benefits to attract acquirers. These tax benefits were in the form of loss-carry-forward provisions. Before 1989, an acquirer could make full use of these provisions to lower its tax liability. Although this practice lowered the FSLIC's cost of resolving thrifts, it merely transferred the cost to the federal budget. In 1988, the FSLIC estimated that the Treasury would lose \$5.5 billion in forgone tax collections from resolved thrifts. The FSLIC sold about \$2.7 billion of these benefits to acquirers.

Other terms of the P&A deals also are very difficult to value. For example, as part of the P&A the acquirer was granted certain regulatory forbearances. Relief was granted from supervisory action for noncompliance with statutory and regulatory provisions in cases in which the bad assets or liabilities were the cause of the noncompliance. These forbearances commonly included relief from liquidity requirements and capital standards (that is, acquired bad assets were included in capital despite their poor quality).

11. See, for example, Kormendi and others, *Crisis Resolution in the Thrift Industry*.

12. For a detailed description of these noncash incentives, see, for example, Kormendi and others, *Crisis Resolution in the Thrift Industry*; and White, *The S&L Debacle*.

Appendix C

Data on the Thrift Industry and Thrift Failures, 1980-1992

This appendix contains information on the financial performance of the thrift industry and on thrifts resolved by the Federal Savings and Loan Insurance Corporation and the Resolution Trust Corporation. The data provide an overview of the thrift industry (Table C-1), a history of thrift resolutions (Table C-2), a breakdown of the number of thrift resolutions by state (Table C-3), and a breakdown of the estimated cost of resolutions by state (Table C-4).

Table C-1.
Thrifts Insured by the Federal Savings and Loan Insurance Corporation and the Savings Association Insurance Fund, 1980 Through the Third Quarter of 1992

	1980	1981	1982	1983	1984	1985	1986
Assets and Net Worth (Billions of dollars)							
Number of Institutions	3,993	3,751	3,287	3,146	3,136	3,246	3,220
Total Assets (RAP Basis) ^a	604	640	686	814	978	1,070	1,164
Net Worth (GAAP Basis) ^a	32	27	20	25	27	34	39
Tangible Net Worth	32	25	4	4	3	9	15
Income (Millions of dollars)							
Net After-Tax Income	781	-4,631	-4,142	1,945	1,022	3,728	131
Net Operating Income	790	-7,114	-8,761	-46	990	3,601	4,562
Net Non-operating Income	398	964	3,041	2,567	796	2,215	-1,290
Taxes	407	-1,519	-1,578	576	764	2,087	3,141
Asset Portfolio (Percentage of total)							
Home Mortgages ^c	66.5	65.0	56.3	49.8	44.9	42.4	38.9
Mortgage-Backed Securities	4.1	5.0	3.6	10.9	11.1	10.4	13.1
Mortgage Assets	70.9	70.0	64.9	60.7	56.0	52.8	52.0
Type of Institution							
Stock Institutions							
As a percentage of all institutions	20.0	21.0	23.0	24.0	30.0	33.0	37.0
As a percentage of total assets	27.0	29.0	30.0	40.0	52.0	56.0	62.0
Federally Chartered Institutions							
As a percentage of all institutions	50.0	51.0	51.0	51.0	54.0	53.0	54.0
As a percentage of total assets	56.0	63.0	70.0	66.0	64.0	64.0	64.0
Ratio of Tangible Capital to Assets (Assets in billions of dollars)							
Greater Than 6 Percent							
Number of thrifts	1,701	1,171	787	661	643	806	972
Total assets ^d	181	101	59	84	62	95	156
Between 3 Percent and 6 Percent							
Number of thrifts	1,956	1,766	1,202	1,091	945	1,009	995
Total assets ^d	379	348	190	222	227	259	316
Between 1.5 Percent and 3 Percent							
Number of thrifts	230	524	592	569	526	460	354
Total assets ^d	39	113	136	185	168	212	191
Between Zero Percent and 1.5 Percent							
Number of thrifts	63	178	291	310	327	266	227
Total assets ^d	4	50	81	88	153	135	144
Less Than Zero Percent							
Number of thrifts	43	112	415	515	695	705	672
Total assets ^d	0.4	29	220	234	336	335	324
Conservatorships (Assets in billions of dollars)							
Number of Thrifts	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Tangible Assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Resolutions (Assets in millions of dollars)^e							
Number of Thrifts	11	28	63	36	22	31	46
Total Assets	1,459	13,907	17,663	4,630	5,081	6,366	12,450
Estimated Present Value Cost	166	760	806	275	743	1,026	3,066

SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board, the Office of Thrift Supervision, the Resolution Trust Corporation, and Ferguson and Company. The format of this table is adapted from James R. Barth, Philip F. Bartholomew, and Carol J. Labich, "Moral Hazard and the Thrift Crisis: An Empirical Analysis," *Consumer Finance Law Quarterly Report*, vol. 44, no. 1 (Winter 1990), p. 23.

NOTES: Data for 1988 are revised as of 12/89; data for 1989 through 1991 are revised as of 1/93; data for 1992 are preliminary. Industry data for 1989 through 1992 do not include those thrifts in conservatorships at year-end (the thrifts included are referred to as private-sector thrifts by the Office of Thrift Supervision). n.a. = not available.

a. RAP basis = measured using regulatory accounting practices established by the Federal Home Loan Bank Board through August 9, 1989, and the Office of Thrift Supervision thereafter; GAAP basis = measured using generally accepted accounting principles.

Table C-1.
Continued

	1987	1988	1989	1990	1991	1992:iii
Assets and Net Worth (Billions of dollars)						
Number of Institutions	3,147	2,948	2,593	2,337	2,096	1,954
Total Assets (RAP Basis) ^a	1,251	1,351	1,112	994	876	816
Net Worth (GAAP Basis) ^a	34	46	47	50	52	55
Tangible Net Worth	9	23	36	38	43	48
Income (Millions of dollars)						
Net After-Tax Income	-7,779	-12,057	-4,243	-2,018	2,133	4,049 ^b
Net Operating Income	2,850	907	-4,742	-2,010	3,341	5,462 ^b
Net Non-operating Income	-7,930	-11,012	1,443	1,001	1,106	661 ^b
Taxes	2,699	1,952	943	1,098	2,364	2,223 ^b
Asset Portfolio (Percentage of total)						
Home Mortgage: ^c	37.8	38.6	42.9	44.4	46.7	47.2
Mortgage-Backed Securities	15.6	15.4	14.0	14.5	14.3	14.5
Mortgage Assets	53.4	54.0	56.9	58.9	61.0	61.7
Type of Institution						
Stock Institutions						
As a percentage of all institutions	40.0	44.0	44.0	44.0	46.0	n.a.
As a percentage of total assets	70.0	74.0	75.0	75.0	78.0	n.a.
Federally Chartered Institutions						
As a percentage of all institutions	56.0	58.0	60.0	64.0	65.0	n.a.
As a percentage of total assets	65.0	71.0	75.0	83.0	84.0	n.a.
Ratio of Tangible Capital to Assets (Assets in billions of dollars)						
Greater Than 6 Percent						
Number of thrifts	1,113	1,128	1,180	1,132	1,148	1,253
Total assets ^d	188	196	206	195	227	298
Between 3 Percent and 6 Percent						
Number of thrifts	891	852	813	837	763	624
Total assets ^d	356	414	480	484	468	420
Between 1.5 Percent and 3 Percent						
Number of thrifts	277	280	245	163	105	50
Total assets ^d	196	240	206	154	104	69
Between Zero Percent and 1.5 Percent						
Number of thrifts	194	157	120	101	47	17
Total assets ^d	143	181	59	83	36	16
Less Than Zero Percent						
Number of thrifts	672	531	239	109	33	10
Total assets ^d	336	320	192	89	41	12
Conservatorships (Assets in billions of dollars)						
Number of Thrifts	n.a.	n.a.	281	179	91	69
Total Tangible Assets	n.a.	n.a.	93	86	47	32
Resolutions (Assets in millions of dollars)^e						
Number of Thrifts	47	205	37	315	232	69 ^f
Total Assets	10,664	101,242	10,808	94,248	75,947	35,339
Estimated Present-Value Cost	3,704	31,790	5,914	37,302	34,506	6,715

b. Income numbers are cumulative through 1992:iii (that is, year to date).

c. Home mortgages exclude multifamily and nonresidential mortgages.

d. Assets reported are on a tangible basis for 1980 through 1989 and on a RAP basis thereafter.

e. Data for 1988 do not include 18 "stabilizations" that had assets of \$7,463 million, tangible net worth of negative \$3,348 million, and an estimated present-value resolution cost of \$6,838 million. Data for 1989 do not include seven resolutions by the Federal Savings and Loan Insurance Corporation (reportedly at no cost to the FSLIC) and two resolutions by the Resolution Trust Corporation (reportedly at no cost to the RTC). The data on the resolution costs reflect RTC revisions for 1989 and 1990 resolutions (made in June 1991), but do not reflect revisions by the General Accounting Office for cost estimates of 1988 resolutions.

f. Resolution data for 1992:iii are cumulative through September 30, 1992.

Table C-2.
Attrition Among Institutions Insured by the Federal Savings and Loan Insurance Corporation,
1980-1992 (Assets and costs in millions of dollars)

Year	Resolutions Requiring FSLIC or RTC Assistance					
	Liquidations			Mergers and Other Types of Assisted Resolutions		
	Number	Total Assets	Total Cost	Number	Total Assets	Total Cost
1980	0	0	0	11	1,459	166
1981	1	89	30	27	13,818	730
1982	1	36	3	62	17,627	803
1983	5	262	60	31	4,368	215
1984	9	1,498	583	13	3,583	160
1985	8	1,752	549	23	4,614	477
1986	10	582	253	36	11,868	2,813
1987	17	3,045	2,276	30	7,619	1,428
1988	26	3,052	2,586	179	98,190	29,203
1989	30	2,202	1,533	7	8,606	4,380
1990	143	18,272	11,949	172	75,976	25,353
1991	67	17,156	9,625	165	58,791	24,881
1992	6	274	71	63	35,065	6,644
Total	323	48,220	29,519	819	341,584	97,254

SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board and the Office of Thrift Supervision.

NOTES: Costs are estimated present-value costs of resolution.

Total assets after 1988 are based on gross assets reported by the Resolution Trust Corporation (RTC).

Table C-2.
Continued

Year	Resolutions Requiring FSLIC or RTC Assistance			Resolutions Requiring No Assistance	
	All Assisted Resolutions			Management	Supervisory
	Number	Total Assets	Total Cost	Consignment Cases ^a	Mergers
1980	11	1,459	166	0	21
1981	28	13,907	760	0	54
1982	63	17,663	806	0	184
1983	36	4,630	275	0	34
1984	22	5,081	743	0	14
1985	31	6,366	1,026	23	10
1986	46	12,450	3,066	29	5
1987	47	10,664	3,704	25	5
1988	205	101,242	31,790	18 ^b	6
1989	37	10,808 ^c	5,914 ^d	0	0
1990	315	94,248 ^c	37,302 ^d	0	0
1991	232	75,947 ^c	24,506 ^d	0	0
1992	69	35,339 ^c	6,715 ^d	0	0
Total	1,142	389,804	126,773	95	333

a After 1988, thrifts were placed into an RTC conservatorship before resolution; before 1989 many thrifts were placed into a management consignment program.

b Resolution of these institutions--called stabilizations by the Federal Home Loan Bank Board--was incomplete.

c Total assets are gross assets reported by the RTC at the time of resolution. For years 1989 through 1992, assets in the quarter before takeover were \$14,028 million, \$142,008 million, \$134,310 million, and \$46,632 million, respectively.

d Resolution costs for 1989 through 1992 were revised by the RTC as of March 1993.

Table C-3.
Thrift Resolutions Conducted by the Federal Savings and Loan Insurance Corporation
and the Resolution Trust Corporation, by State, 1980-1992

State	1980	1981	1982	1983	1984	1985	1986
Alabama	0	0	0	1	0	0	0
Alaska	0	1	0	0	0	0	1
Arizona	0	0	0	0	0	1	1
Arkansas	0	0	0	0	0	0	0
California	0	0	2	0	1	1	8
Colorado	0	0	0	0	0	1	1
Connecticut	0	0	0	0	0	0	0
Delaware	0	0	0	0	0	0	0
District of Columbia	0	1	0	0	0	1	0
Florida	1	3	2	0	0	1	2
Georgia	0	0	5	0	0	0	0
Hawaii	1	0	0	0	0	1	0
Idaho	0	0	0	0	0	0	0
Illinois	2	5	13	2	1	1	1
Indiana	0	0	0	6	0	0	0
Iowa	2	0	0	1	0	1	0
Kansas	0	0	1	0	0	1	2
Kentucky	0	0	3	0	0	1	1
Louisiana	0	1	4	5	1	3	6
Maine	0	0	2	0	0	0	0
Maryland	0	0	0	0	0	0	0
Massachusetts	0	1	2	0	1	0	0
Michigan	1	0	0	1	0	0	1
Minnesota	0	1	0	1	0	0	0
Mississippi	0	0	1	0	2	1	0
Missouri	0	3	1	4	0	0	2
Montana	0	0	1	0	0	1	0
Nebraska	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	1
New Hampshire	0	0	0	0	0	0	0
New Jersey	1	1	4	0	1	0	0
New Mexico	1	0	1	1	0	1	1
New York	0	6	7	1	1	0	1
North Carolina	0	2	0	0	0	0	0
North Dakota	0	1	1	0	1	0	0
Ohio	1	0	0	4	2	3	6
Oklahoma	0	0	0	0	0	0	1
Oregon	0	0	0	0	0	1	1
Pennsylvania	0	0	3	2	0	0	0
Puerto Rico	0	1	1	0	1	0	0
Rhode Island	1	0	0	0	1	0	0
South Carolina	0	0	0	0	0	0	1
South Dakota	0	0	0	2	1	0	0
Tennessee	0	0	0	0	5	3	0
Texas	0	1	8	1	2	1	2
Utah	0	0	0	0	0	1	0
Vermont	0	0	0	0	0	0	0
Virginia	0	0	1	3	1	2	2
Washington	0	0	0	0	0	4	2
West Virginia	0	0	0	0	0	0	1
Wisconsin	0	0	0	1	0	0	0
Wyoming	0	0	0	0	0	0	1
Total	11	28	63	36	22	31	46

Table C-3.
Continued

State	1987	1988	1989	1990	1991	1992	State Total
Alabama	1	1	1	4	2	1	11
Alaska	1	0	0	2	0	0	5
Arizona	2	2	2	10	5	1	24
Arkansas	0	0	0	5	3	1	9
California	5	18	6	28	15	6	90
Colorado	1	4	0	13	4	0	24
Connecticut	0	0	0	2	2	3	7
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	2
Florida	0	7	3	12	16	7	54
Georgia	0	1	1	5	3	4	19
Hawaii	0	0	0	0	0	0	2
Idaho	2	1	0	0	0	0	3
Illinois	3	15	1	31	11	4	90
Indiana	0	7	0	3	0	1	17
Iowa	1	10	1	4	4	2	26
Kansas	1	1	2	15	3	0	26
Kentucky	0	3	0	1	2	0	11
Louisiana	9	1	6	21	20	1	78
Maine	0	0	0	2	2	0	6
Maryland	0	0	0	0	1	0	1
Massachusetts	1	0	0	3	4	2	14
Michigan	1	4	0	2	0	1	11
Minnesota	0	5	0	4	1	0	12
Mississippi	0	0	0	8	10	0	22
Missouri	2	0	0	10	1	3	26
Montana	0	1	0	0	0	0	3
Nebraska	1	0	1	7	0	0	9
Nevada	0	0	0	1	0	0	2
New Hampshire	0	0	0	0	1	0	1
New Jersey	2	3	0	3	20	3	38
New Mexico	0	1	0	6	4	1	17
New York	0	0	0	4	6	3	29
North Carolina	1	1	1	2	3	1	11
North Dakota	0	0	0	2	1	0	6
Ohio	2	5	0	4	10	2	39
Oklahoma	1	11	0	8	6	3	30
Oregon	2	5	0	2	0	0	11
Pennsylvania	0	0	3	1	6	2	17
Puerto Rico	0	0	0	1	0	0	4
Rhode Island	0	0	0	0	0	1	3
South Carolina	0	0	1	0	1	0	3
South Dakota	0	1	0	0	1	1	6
Tennessee	0	3	0	5	4	1	21
Texas	4	81	8	67	55	7	237
Utah	2	0	0	4	0	1	8
Vermont	0	0	0	0	0	0	0
Virginia	1	3	0	4	3	5	25
Washington	1	5	0	2	1	0	15
West Virginia	0	3	0	2	0	0	6
Wisconsin	0	0	0	2	0	1	4
Wyoming	0	2	0	3	1	0	7
Total	47	205	37	315	232	69	1,142

SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board and the Resolution Trust Corporation.

Table C-4.
Estimated Cost of Resolutions Conducted by the Federal Savings and Loan Insurance Corporation and the Resolution Trust Corporation, by State, 1980-1992 (In millions of dollars)

State	1980	1981	1982	1983	1984	1985	1986
Alabama	0	0	0	3	0	0	0
Alaska	0	3	0	0	0	0	4
Arizona	0	0	0	0	0	82	657
Arkansas	0	0	0	0	0	0	0
California	0	0	3	0	330	8	159
Colorado	0	0	0	0	0	22	36
Connecticut	0	0	0	0	0	0	0
Delaware	0	0	0	0	0	0	0
District of Columbia	0	3	0	0	0	62	0
Florida	15	34	16	0	0	15	701
Georgia	0	0	1	0	0	0	0
Hawaii	1	0	0	0	0	3	0
Idaho	0	0	0	0	0	0	0
Illinois	17	76	356	31	37	3	16
Indiana	0	0	0	38	0	0	0
Iowa	3	0	0	9	0	10	0
Kansas	0	0	3	0	0	8	8
Kentucky	0	0	8	0	0	16	93
Louisiana	0	0	2	20	4	108	418
Maine	0	0	51	0	0	0	0
Maryland	0	0	0	0	0	0	0
Massachusetts	0	24	10	0	21	0	0
Michigan	11	0	0	16	0	0	13
Minnesota	0	95	0	1	0	0	0
Mississippi	0	0	1	0	8	3	0
Missouri	0	51	1	78	0	0	75
Montana	0	0	5	0	0	5	0
Nebraska	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0	0
New Jersey	10	9	22	0	16	0	0
New Mexico	2	0	2	6	0	5	2
New York	0	362	211	13	4	0	59
North Carolina	0	5	0	0	0	0	0
North Dakota	0	13	4	0	39	0	0
Ohio	104	0	0	28	28	2	223
Oklahoma	0	0	0	0	0	0	71
Oregon	0	0	0	0	0	146	21
Pennsylvania	0	0	10	13	0	0	0
Puerto Rico	0	84	7	0	1	0	0
Rhode Island	3	0	0	0	10	0	0
South Carolina	0	0	0	0	0	0	0
South Dakota	0	0	0	4	0	0	0
Tennessee	0	0	0	0	80	18	0
Texas	0	1	79	0	164	155	493
Utah	0	0	0	0	0	163	0
Vermont	0	0	0	0	0	0	0
Virginia	0	0	14	12	1	18	0
Washington	0	0	0	0	0	174	-13
West Virginia	0	0	0	0	0	0	0
Wisconsin	0	0	0	3	0	0	0
Wyoming	0	0	0	0	0	0	30
Total	166	760	806	275	743	1,026	3,066

Table C-4.
Continued

State	1987	1988	1989	1990	1991	1992	State Total
Alabama	0	13	7	270	25	61	379
Alaska	2	0	0	220	0	0	229
Arizona	90	28	78	664	1,612	13	3,223
Arkansas	0	0	0	4,076	2,215	24	6,315
California	716	5,438	539	2,207	6,008	1,405	16,812
Colorado	0	585	0	1,303	484	0	2,429
Connecticut	0	0	0	45	40	66	151
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	65
Florida	0	1,325	701	2,321	2,436	1,491	9,054
Georgia	0	5	22	260	184	82	554
Hawaii	0	0	0	0	0	0	4
Idaho	121	2	0	0	0	0	123
Illinois	173	1,502	35	830	421	81	3,577
Indiana	0	145	0	44	0	2	230
Iowa	102	339	47	43	84	15	651
Kansas	20	20	93	1,512	91	0	1,755
Kentucky	0	84	0	3	48	0	253
Louisiana	540	177	349	874	827	441	3,759
Maine	0	0	0	647	510	0	1,209
Maryland	0	0	0	0	16	0	16
Massachusetts	69	0	0	443	230	25	823
Michigan	14	175	0	44	0	2	275
Minnesota	0	205	0	1,028	4	0	1,333
Mississippi	0	0	0	417	232	0	661
Missouri	99	0	0	1,035	5	333	1,677
Montana	0	11	0	0	0	0	21
Nebraska	5	0	43	499	0	0	547
Nevada	0	0	0	22	0	0	22
New Hampshire	0	0	0	0	23	0	23
New Jersey	56	230	0	70	2,651	187	3,251
New Mexico	0	80	0	443	1,575	39	2,153
New York	0	0	0	1,912	788	409	3,758
North Carolina	0	34	40	159	64	40	342
North Dakota	0	0	0	173	6	0	235
Ohio	22	541	0	287	260	5	1,499
Oklahoma	41	502	0	363	370	25	1,371
Oregon	27	362	0	267	0	0	823
Pennsylvania	0	0	988	443	1,664	144	3,261
Puerto Rico	0	0	0	365	0	0	457
Rhode Island	0	0	0	0	0	19	32
South Carolina	0	0	8	0	107	0	115
South Dakota	0	8	0	0	4	41	57
Tennessee	0	34	0	128	18	88	366
Texas	1,504	19,491	2,964	12,910	11,137	116	49,013
Utah	46	0	0	568	0	1	778
Vermont	0	0	0	0	0	0	0
Virginia	35	136	0	108	359	1,551	2,233
Washington	22	92	0	164	5	0	444
West Virginia	0	81	0	12	0	0	93
Wisconsin	0	0	0	84	0	13	100
Wyoming	0	147	0	39	5	0	221
Total	3,704	31,790	5,914	37,302	34,506	6,715	126,773

SOURCE: Congressional Budget Office using data from the Federal Home Loan Bank Board and the Resolution Trust Corporation

RELATED CBO PUBLICATIONS

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The Federal Home Loan Bank System, forthcoming.

The Economic Effects of the Savings & Loan Crisis, January 1992.

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Reforming Federal Deposit Insurance, September 1990.

Questions about these studies should be directed to CBO's Natural Resources and Commerce Division at (202) 226-2940. The Office of Intergovernmental Relations is CBO's Congressional liaison office and can be reached at 226-2600. Copies of the studies may be obtained by calling CBO's Publications Office at 226-2809.

Unpublished Staff Memorandums

"Regional Analysis of Bank Lending," February 1993.

"The RTC's Loan Securitization Process," July 1992

"The Cost of Forbearance During the Thrift Crisis," June 1991.

"Projected Impact of Increased Insurance Premiums on the Banking Industry and the Bank Insurance Fund," May 1991.

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